DRAFT OWYHEE RESOURCE MANAGEMENT PLAN AND DRAFT ENVIRONMENTAL IMPACT STATEMENT

August, 1996 • Volume 2 (of 3)

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Draft Owyhee Resource Management Plan and Draft Environmental Impact Statement

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Table of Contents • Volume 2

VOLUME 1 *(Summarized)*

CHAPTER I

Introduction

CHAPTER II

Description of the Alternatives

CHAPTER III

Affected Environment

CHAPTER IV

Environmental Consequences

CHAPTER V

Consultation and Coordination

VOLUME 2

APPENDIX

SOIL-1 .... A-1
WATR-1 .... A-2
WATR-2 .... A-12
RIPN-1 .... A-14
FORS-1 .... A-15
FORS-2 .... A-16
LVST-1 .... A-17
FIRE-1 .... A-182
FIRE-2 .... A-184
FIRE-3 .... A-185
FIRE-4 .... A-186
FIRE-5 .... A-188
FIRE-6 .... A-189
FLUM-1 .... A-190
FLUM-2 .... A-191
FLUM-3 .... A-192
FLUM-4 .... A-198
FLUM-5 .... A-204
RECT-1 .... A-205
RECT-2 .... A-210
RECT-3 .... A-215
RECT-4 .... A-298
RECT-5 .... A-324
RECT-6 .... A-327
VISL-1 .... A-402
SOCE-1 .... A-404
MONT-1 .... A-405
RISP-1 .... A-412

VOLUME 3 *(Summarized)*

TABLES

FIGURES

MAPS

Appendix

Appendix

SOIL-1 Soil Erosion Hazard Analysis A-1
WATR-1 State of Idaho Water Quality Standards A-2
WATR-2 Water Quality Monitoring and Data Analysis Methods A-12
RIPN-1 Characteristics of riparian areas in unsatisfactory condition as compared to riparian areas in satisfactory condition in the Owyhee Resource Area A-14
FORS-1 Woodland Classification Criteria A-15
FORS-2 Douglas-fir Habitat Types A-16
LVST-1 Allotment Summary A-17
FIRE-1 Prescribed Fire Management Plan A-182
FIRE-2 Vegetation Communities for Prescribed Fire A-184
FIRE-3 Wilderness Study Area Fire Management Plan A-185
FIRE-4 Wilderness Study Area Fire Management Plan - Fire Situation Analysis A-186
FIRE-5 Fire Management Zones A-188
FIRE-6 Fire Occurrence by Fire Management Zones A-189
FLUM-1 Criteria for Determination of Oil and Gas Potential A-190
FLUM-2 Definition of Levels of Petroleum Resource Potential and Certainty of Assessment for Idaho A-191
FLUM-3 Oil and Gas Potential of the Owyhee Resource Area A-192
FLUM-4 Description of Typical Oil and Gas Exploration and Development Activities A-198
FLUM-5 Definition of Levels of Geothermal Potential and Levels of Certainty A-204
RECT-1 Management Guidelines for Potential Wild and Scenic Rivers A-205
RECT-2 Final Eligibility and Classification Determinations for Potential Wild, Scenic and Recreational River Designations ..... A-210 ✓
RECT-3 Eligibility and Classification for Eligible River Segments ..... A-215 ✓
RECT-4 Non-eligible Determinations A-298
RECT-5 River Suitability Summary ..... A-324 ✓
RECT-6 Suitability Determination for Eligible River and Stream Segments ..... A-327 ✓
VISL-1 Visual Resource Management Classifications and Objectives ..... A-402 ✓
SOCE-1 Input-Output Modeling Technique ..... A-404 ✓
MONT-1 Monitoring A-405
RISP-1 Standard Procedures and Design Elements for Range Improvements A-412

Appendix SOIL-1. Soil Erosion Hazard Analysis.

Soil erosion hazard analysis used to produce Table Soil-1.

Soil erosion hazard ratings are based on the soil's Wind Erodibility Group (WEG), the soil's Erosion Susceptibility Factor (K), and the slope. A WEG is a collection of soils that have similar properties affecting their resistance to soil blowing. The groups indicate the susceptibility to blowing and range from 1 to 8 with 1 being the most susceptible through 8 being the least susceptible. The erosion susceptibility factor (K) shows how easily each soil will erode when rain falls on bare ground. It is a measure of the susceptibility of soil particles to detachment and transport by rainfall and runoff.

Soils in WEG 1 to 4, soils with an erosion susceptibility factor (K) of greater than .43, and soils on slopes exceeding 30 percent were considered to have a high erosion hazard rating.

Soil information was taken from the Soil Conservation Service's Soil Survey of Owyhee County Area, Idaho (awaiting publication).

Data was input into a group information system (GIS) for full area analysis. Digital elevation model (DEM) data was first inputed to depict all areas with slopes greater than 30 percent in the resource area. Then each soil map unit was analyzed based on the wind erodibility index and erosion susceptibility factor (K) of each soil component in the soil map unit. For analysis purposes it was decided that if more than 60 percent of a soil map unit fit the high erosion hazard potential based on wind erodibility index and/or erosion susceptibility factor (K), then the entire map unit would be input into the GIS system as having a high erosion hazard potential.

Erosion hazard, or the susceptibility of a soil to erosion, is the potential inherent in the soil itself to erode if the forces that cause erosion are applied to an area that is not adequately protected. Erosion hazard does not describe past erosion; it describes the possibility of future erosion.

Appendix WATR-1. State of Idaho Water Quality Standards. (From Idaho Dept. of Health and Welfare Regulations, Idaho Code).

A. Beneficial use classifications

Cold Water Biota

Waters which are suitable or intended to be made suitable for protection and maintenance of viable communities of aquatic organisms and populations of significant aquatic species which have optimal growing temperatures below 18 C°.

Warm Water Biota

Waters which are suitable or intended to be made suitable for protection and maintenance of viable communities of aquatic organisms and populations of significant aquatic species which have optimal growing temperatures above 18 C°.

Salmonid Spawning

Waters which provide or could provide a habitat for active self-propagating populations of salmonid fishes.

Primary Contact Recreation

Surface waters which are suitable or intended to be suitable for prolonged and intimate contact by humans or for recreational activities when the ingestion of small quantities of water is likely to occur. Such waters include, but are not restricted to, those used for swimming, water skiing, or skin diving.

Secondary Contact Recreation

Surface waters which are suitable for recreational uses on or about the water and which are not included in the primary contact category. Theses waters may be used for fishing, boating, wading, and other activities where ingestion of raw water is not probable.

Agricultural Water Supplies

Waters which are suitable or intended to be made suitable for the irrigation of crops or as drinking water for livestock.

Domestic Water Supplies

Waters which are suitable or intended to be made suitable for drinking water supplies.

B. General use designations

Unspecified Surface Waters

Surface waters not specified in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2110-01.2160 are designated as primary contact recreational waters, unless the physical characteristics of a water body prevent primary contact recreation. In those cases, the water body is designated a secondary contact recreational water.

Industrial Water Supplies, Wildlife Habitats, and Aesthetics

All State waters are designated for the uses of industrial water supplies (all state ground waters), wildlife habitat and aesthetics (all state surface waters). Water quality criteria for those uses will generally be satisfied by the general water quality standards (IDHW Rules and Regulations Section 01.2200). Should specificity be desired or necessary to protect a specific use, appropriate criteria will be adopted in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2250 or 01.2275-01.2299.

Special Resource Waters

Waters of the State may be designated as special resource waters. Designation as a special resource water recognizes at least one of the following characteristics:

a. The water is of outstandingly high quality, exceeding both the criteria for primary contact recreation and cold water biota; or
b. The water is of unique ecological significance; or
c. The water possesses outstanding recreational or aesthetic qualities; or
d. Intensive protection of the quality of the water is in the paramount interest of the people of Idaho; or
e. The water is part of the National Wild and Scenic River System, is within a State or National Park or wildlife refuge and is of prime or major importance to that park or refuge.
f. Intensive protection of the quality of the water is necessary to maintain an existing but jeopardized beneficial use.

Waters determined to be special resource waters are listed in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2110-1.2160. Modifications of this listing can be made only through amendment of these rules, pursuant to Section 67-5205a., Idaho Code, in accordance with Sections 39-107(8) and 67-5203, Idaho Code.

Designated Stream Segment of Concern

This designation is to provide additional emphasis to specific stream segments. A coordinated water quality monitoring program will be implemented to provide current and ongoing data trends, status of beneficial uses, and best management practice (BMP) effectiveness in meeting water quality standards and protecting beneficial uses. These streams will receive highest priority for water quality management and monitoring by state and federal agencies. Management extends to the tributaries of designated stream segments of concern in order to maintain and enhance the quality of the designated stream.

Appendix WATR-1. State of Idaho Water Quality Standards. (From Idaho Dept. of Health and Welfare Regulations, Idaho Code) (cont.).

Idaho Water Quality Standards

Primary contact recreation

Between 1 May and 30 September of each calendar year, waters designated for primary contact recreation are not to contain fecal coliform bacteria significant to the public health in concentrations exceeding:

A. 500/100 ml at any time; and
B. 200/100 ml in more than 10% of the total samples taken over a 30 day period; and
C. A geometric mean of 50/100 ml based on a minimum of 5 samples taken of a 30 day period.

Secondary contact recreation

Waters designated for primary contact recreation are not to contain fecal coliform bacteria significant to the public health in concentrations exceeding:

A. 800/100 ml at any time; and
B. 400/100 ml in more than 10% of the total samples taken over a 30 day period; and
C. A geometric mean of 200/100 ml based on a minimum of 5 samples taken of a 30 day period.

Cold water biota

Waters designated for cold water biota are to exhibit the following characteristics:

A. Dissolved oxygen concentrations exceeding 6 mg/l at all times. In lakes and reservoirs this standard does not apply to:
   1. The bottom 20% of the water depth in natural lakes and reservoirs where depths are 35 m are less.
   2. The bottom 7 m of water depth in natural lakes and reservoirs where depths are greater than 35 m.
   3. Those waters of the hypolimnion in stratified lakes and reservoirs.
B. Hydrogen ion concentrations (pH) within the range of 6.5-9.0.
C. Water temperatures of 22 C° or less with a maximum daily average not greater than 19 C°.
D. Total concentration of dissolved gas not exceeding 110% of saturation at atmospheric pressure at the point of sample collection.

E. Concentrations of total ammonia not to exceed:

1. Daily maximum concentrations for the specific temperature and pH conditions indicated:

Maximum allowable concentrations of total Ammonia mg/1 NH3

	Temperature C°			
pH	5	10	15	20
7.0	26.0	25.0	24.0	23.0
7.25	22.0	20.0	19.7	19.2
7.5	16.3	15.5	14.9	14.6
7.75	11.4	10.9	10.5	10.3
8.0	7.5	7.1	6.9	6.8

2. The following weekly average concentrations for the specific pH and temperature conditions indicated.

Maximum allowable concentrations of total Ammonia mg/1 NH3

	Temperature C°			
pH	5	10	15	20
7.0	2.4	2.2	2.2	1.49
7.25	2.4	2.2	2.2	1.50
7.5	2.4	2.2	2.2	1.50
7.75	2.2	2.1	2.0	1.40
8.0	1.44	1.37	1.33	0.93

3. Where pH and temperature conditions fall outside the ph and temperature ranges listed in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2250,03.e.i. and 11., the allowable daily maximum and weekly average concentrations of total ammonia shall be those values specified foe other specific pH and temperature conditions in EPA's Ambient Water Quality Criteria for Ammonia, January 1985, 440/5-85-001.

Salmonid spawning

Waters designated for salmonid spawning are to exhibit the following characteristics during the spawning period and incubation for the particular species inhabiting those waters:

A. Dissolved oxygen concentrations exceeding 6 mg/l or 90% of saturation whichever is greater.

B. Hydrogen ion concentrations (pH) within the range of 6.5-9.0.

Appendix WATR-1. State of Idaho Water Quality Standards. (From Idaho Dept. of Health and Welfare Regulations, Idaho Code) (cont.).

C. Water temperatures of 13 C° or less with a maximum daily average not greater than 9 C°.

D. Total concentration of dissolved gas not exceeding 110% of saturation at atmospheric pressure at the point of sample collection.

E. Concentrations of total ammonia not to exceed:

1. Daily maximum concentrations for the specific temperature and pH conditions indicated:

Maximum allowable concentrations of total Ammonia mg/1 NH3

Temperature C°

pH	5	10	15	20
7.0	26.0	25.0	24.0	23.0
7.25	22.0	20.0	19.7	19.2
7.5	16.3	15.5	14.9	14.6
7.75	11.4	10.9	10.5	10.3
8.0	7.5	7.1	6.9	6.8

2. The following weekly average concentrations for the specific pH and temperature conditions indicated.

Maximum allowable concentrations of total Ammonia mg/1 NH3

Temperature C°

pH	5	10	15	20
7.0	2.4	2.2	2.2	
7.25	2.4	2.2	2.2	1.50
7.5	2.4	2.2	2.2	1.50
7.75	2.2	2.1	2.0	1.40
8.0	1.44	1.37	1.33	0.93

3. Where pH and temperature conditions fall outside the ph and temperature ranges listed in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2250,03.e.i. and 11., the allowable daily maximum and weekly average concentrations of total ammonia shall be those values specified foe other specific pH and temperature conditions in EPA's Ambient Water Quality Criteria for Ammonia, January 1985, 440/5-85-001.

Warm water biota

Waters designated for warm water biota are to exhibit the following characteristics:

A. Dissolved oxygen concentrations exceeding 5 mg/l at all times. In lakes and reservoirs this standard does not apply to:

1. The bottom 20% of the water depth in natural lakes and reservoirs where depths are 35 m are less.

2. The bottom 7 m of water depth in natural lakes and reservoirs where depths are greater than 35 m.

3. Those waters of the hypolimnion in stratified lakes and reservoirs.

B. Hydrogen ion concentrations (pH) within the range of 6.5-9.0.

C. Water temperatures of 33 C° or less with a maximum daily average not greater than 29 C°.

D. Total concentration of dissolved gas not exceeding 110% of saturation at atmospheric pressure at the point of sample collection.

E. Concentrations of total ammonia not to exceed:

1. The following daily maximum concentrations for the specific temperature and pH conditions indicated:

Maximum allowable concentrations of total Ammonia mg/1 NH3				
	Temperature C°			
pH	5	10	15	20
7.0	26.0	25.0	24.0	23.0
7.25	22.0	20.0	19.7	19.2
7.5	16.3	15.5	14.9	14.6
7.75	11.4	10.9	10.5	10.3
8.0	7.5	7.1	6.9	6.8

2. The following weekly average concentrations for the specific pH and temperature conditions indicated.

Maximum allowable concentrations of total Ammonia mg/1 NH3				
	Temperature C°			
pH	5	10	15	20
7.0	2.4	2.2	2.2	1.49
7.25	2.4	2.2	2.2	1.50
7.5	2.4	2.2	2.2	1.50
7.75	2.2	2.1	2.0	1.40
8.0	1.44	1.37	1.33	0.93

3. Where pH and temperature conditions fall outside the ph and temperature ranges listed in Idaho Department of Health and Welfare Rules and Regulations Sections 01.2250,03.e.i. and 11., the allowable daily maximum and weekly average concentrations of total ammonia shall be those values specified foe other specific pH and temperature conditions in EPA's Ambient Water Quality Criteria for Ammonia, January 1985, 440/5-85-001.

Appendix WATR-1. State of Idaho Water Quality Standards. (From Idaho Dept. of Health and Welfare Regulations, Idaho Code) (cont.).

Definitions for Appendix WATR-1 (from State of Idaho, DEQ)

Antidegradation Agreement - a policy established by EPA which sets minimum requirements for states to conserve, maintain, and protect existing uses and water quality. The antidegradation policy consists of three tiers: 1) requires that existing uses of a water segment and the level of water quality necessary to protect the use must be maintained, 2) requires protection of actual water quality in segments where water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, and 3) requires special protection of waters for which typical uses classifications may not be sufficient to protect outstanding national resource waters.

Basin Area Meetings (BAMs) - one of the three key provisions of the Idaho Antidegradation Agreement which provides for biennial public meetings to be the principal process for public review and input on decisions affecting water quality. The meetings are held in each of the six river basins in Idaho. The meetings are chaired by the governor or his designee and are sponsored jointly by state and federal agencies, Indian tribes, industry, and user groups. The purposes of BAMs are to discuss the current status of water quality and trends in its condition and to allow citizens to nominate stream segments of concern

Beneficial Uses - any of the various uses which may be made of the water of an area including, but not limited to agricultural water supply, domestic water supply, industrial water supply, cold water biota, warm water biota, salmonid spawning, primary contact recreation, secondary contact recreation, wildlife habitats, and aesthetics.

Best Management Practice (BMP) - best management practices or a practice or combination of practices determined by the State to be the most effective and practicable means of preventing or reducing nonpoint source pollution.

Coordinated Monitoring Program - one of the three key provisions of the Idaho Antidegradation Agreement to assure the highest protection of Idaho's water resources by developing a coordinated monitoring program. This program is designed by the agencies and industries responsible for water quality monitoring to maximize time spent collecting water quality data and assure compatibility of the information collected. Monitoring in areas of special concern will significantly more intensive that the normal water quality monitoring activities.

Dissolved Oxygen (DO) - the amount of oxygen dispersed in water and is usually expressed as milligrams per liter (parts per million). The amount of oxygen dissolved in water is affected by temperature, elevation, and total dissolved solids.

Embeddedness - Cobble Embeddedness - the amount of fine sediment that is deposited in the spaces between larger stream particles, such as gravels and cobbles.

Evaluation - a stream segment water quality assessment based on information other than site-specific data. Examples include data on land use, location of nonpoint sources, predictive modeling, and citizen complaints. Perception and best professional judgement are also methods of evaluation. Assessments based on monitored data more than 5 years old are also considered evaluated, not monitored information.

Feedback Loop - a process of nonpoint source management based on implementation of best management practices (BMPs). BMPs are identified through a planning process and applied by land managers for site-specific conditions. The effectiveness of the BMPs in protecting water quality is evaluated through instream water quality monitoring. The data is then evaluated against instream criteria developed to protect the beneficial uses of the water. See Figure WATR-3.

Fully Supported Beneficial Use - there are no pollution sources (point or nonpoint) present that could interfere with the use. If sources are present information indicates that the uses are fully attained.

Impair - Beneficial Use Impairment - when a pollutant impacting surface waters affects a beneficial use so that the use is no longer fully supported.

Monitored - a stream segment water quality assessment based on site-specific data no more than five years old. Sources of data may include water chemistry, riparian habitat, sediment, or biota.

Nonpoint Source Pollution - nonpoint source pollution is water pollution that comes from many varied, non-specific and diffused sources and can be categorized by the general land disturbing activity that causes the pollution.

Not Supported Beneficial Use - waters where a beneficial use cannot be sustained by the water. For any pollutant where EPA criteria or state standards are exceeded by more than 25% or criteria or standards are exceeded by 11-15% and the mean of measurements is greater than the criteria or standards. Generally pollutants are found at levels of concern.

Partially Supported Beneficial Use - water where there is some uncertainty about beneficial use support. For any one pollutant that has been monitored, EPA criteria or state standards are exceeded by 11-25% and the mean of measurements is less than the criteria; or criteria or standards are exceeded by less than 10% and the mean is greater than the criteria. On the basis of evaluated data (not monitored), nonpoint sources are present but may not affect the beneficial use(s) or no sources are present but there are complaints on record.

Point Source Pollution - the type of water quality contamination resulting from the discharges into receiving waters from sewers and other identifiable points. Common point sources of pollution are the discharges from industrial and municipal sewage plants.

Appendix WATR-1. State of Idaho Water Quality Standards. (From Idaho Dept. of Health and Welfare Regulations, Idaho Code) (cont.).

Stream Segment of Concern - A specific stream segment or body of water that has been designated by the Water Quality Advisory Working Committee or the Governor and published in the most current final basin area report. (Source: IDAPA 16.01.02003,58) Stream segments of concern are to receive priority for water quality monitoring and management by state and federal agencies. Any stream segment, regardless of water quality, may be designated as a stream segment of concern.

Sponsoring agencies and organizations will attempt to reach consensus on areas to be designated stream segments of concern. If they cannot reach consensus, the Governor will make the decision. The stream segment of concern is a stream segment or body of water that has been published in a final basin area report and subsequently published every two years as an addendum to the State of Idaho water quality standards.

Supported but Threatened - waters presently fully support their designated uses but may not fully support uses in the future because of anticipated or adverse trends in pollution.

Water Quality - the characteristics or properties of water. A term used to describe the chemical, physical, and biological characteristics of water in respect to its suitability for a beneficial use.

Water Quality Standard - the legally allowable concentration of a constituent in natural waters or effluent discharges. Generally expressed as the maximum or minimum allowable concentration and addressed to a particular beneficial use.

AppendixWATR-2. Water Quality Monitoring and Data Analysis Methods.

I. Stream channel/riparian

Stream channel/riparian evaluations were done by making measurements at individual stations and by low level slow speed helicopter surveys. Instream and riparian habitat condition was evaluated prior to 1990 at stations by visually estimating percent stream canopy cover (over-stream shade), percent bare ground, streambank stability, instream channel stability, percent fines covering the stream bottom, and instream fish cover.

In 1990 and 1991 instream-riparian habitat alteration was evaluated at stations by collecting information on riparian vegetation and streambank stability. Riparian plant communities were assessed using greenline vegetation techniques (Burton 1991, USFS 1990). Greenline variables measured included ecological status, herbaceous riparian stubble height, and woody riparian vegetation species age class composition (Burton 1991). Woody vegetation canopy coverage over the stream was measured using a solar pathfinder (Platts et al. 1987). Streambank stability was assessed following Platts et al. (1983) and Burton (1991) at the same time greenline vegetation was determined. Additional information can be found in the Boise District Water Quality Monitoring Plan.

At-station riparian data was analyzed in relation to Habitat Suitability Information for rainbow trout (Raleigh et al. 1984). Riparian variables were listed within individual grazing allotments as being unsatisfactory based on the following criteria:

fine sediment deposition	>= 20%
undercut streambanks	<= 30%
woody vegetation canopy coverage (shade)	<= 50%
herbaceous vegetation/streambank cover	<= 75%
bank erosion - unnatural	>= 25%
% pools	<= 30% or >= 70%

II. Aquatic invertebrates

Aquatic invertebrates were sampled as indicators of water quality and riparian condition. Invertebrates were collected in 1977-1978 and in 1991. Three samples were taken per site using a Surber sampler. Insects were identified to the lowest feasible taxonomic level. Interpretation of water quality condition was based on the following metrics:

Taxa richness - A measure of stream health based on the variety of distinct taxa. See Species Richness in Table WATR-5.

EPT - A summary of the taxa richness within the orders Ephemeroptera, Plecoptera, and Tricoptera (EPT). These orders are considered to be sensitive to pollution.

Hilsenhoff Biotic Index - The Hilsenhoff Biotic Index summarizes the overall pollution tolerances of the taxa collected. This index can detect nutrient enrichment, high sediment loads, low dissolved oxygen, and thermal impacts.

Abundance - The abundance of invertebrates per square meter is an indicator of habitat availability and fish food abundance.

Percent scrapers - This index reflects the riffle community base, Scrapers decrease in relative abundance in response to sedimentation and organic pollution.

Percent filterers - Filter feeders increase in response to increased fine particulate organic matter. Filtering invertebrates can be sensitive to toxicants.

Percent shredders - Shredders are sensitive to riparian damage and are good indicators of toxicants.

III. Fish community composition

Fish community composition was evaluated using backpack electro-fishing equipment. Generally a minimum stream reach of 20 times the mean width of the stream was sampled. Population estimates were done using a multiple pass removal-depletion method (Zippin 1958). Fish were identified and trout were measured and weighed to the nearest mm and gram, respectively.

IV. Water quality physical and chemical measurements

Water quality constituents important in supporting beneficial uses were sampled from 1976 through 1991. Chemical constituents measured included pH, dissolved oxygen, and heavy metals. Water chemistry samples were analyzed in-house, the State of Idaho Health and Welfare laboratory or at Analytical Laboratories Inc., Boise, Idaho. Physical measurements included water temperature and fine sediment deposition. Water temperature was measured using hand-held thermometers, maximum recording thermometers and continuous recording thermographs. Fine sediment deposition was visually estimated following techniques described by Platts et al. (1987) and Burton (1991).

Appendix RIPN-1. Riparian Area Condition Characteristics.

The following list shows characteristics of riparian areas in unsatisfactory condition as compared to satisfactory condition in the Owyhee Resource Area.

Attribute	Unsatisfactory Condition	Satisfactory Condition
Vegetation components		
vegetation communities	bluegrass dominated low plant diversity	sedge/rush dominated high plant diversity
Stream channel morphology		
ground water levels	low	high
herbaceous streambank cover	<75%	>75%
stream width to depth ratio	high >20	low <15
bank erosion - unnatural	>25%	<25%
Redband trout		
shrub canopy coverage	<50%	>50%
undercut streambanks	<30%	>30%
riffle/run fine sediment deposition	>20%	<20%
percent pools	<30% or >70%	>30% and <70%
instream cover	<25%	>25%
maximum summer water temp.	>22 C_	<22 C_
maximum spawning water temp.	>13 C_	<13 C_
minimum dissolved oxygen concent.	<6 mg/l	>6 mg/l
pool depths	<30 cm (1 ft)	>30 cm
pH values	<6.5 and >9.5	>6.5 and <9.5
trout densities	$<0.5/m^2$	$>0.5/m^2$
Aquatic invertebrate community		
shredders	<15%	>15%
collectors/filterers	>10%	<10%

Appendix FORS-1. Woodland Classification Criteria.

Woodlands, primarily juniper, will be managed through restricted harvesting of forest products for the enhancement of other multiple-use values. Woodlands are classified into one of two categories: productive woodlands and nonproductive woodlands.

Productive Woodlands - Forest lands bearing or capable of bearing vegetation products of commercial character. The lands are economically available for commercial use and are otherwise not withdrawn from such use. These lands are comprised of seral juniper stands where:

a. Stocking densities are generally greater than 40% crown closure.
b. Slope gradients are less than 35% (25% in granitic soils).
c. Indications of adequate regeneration capability are evidenced by mixed age and height classes.
d. Soils are not excessively rocky or characterized by cliffs, rock ledges, and large boulders. Juniper stands exist in swales or on slopes beneath such landforms. Soils are shallow to moderately deep, with loamy texture.
e. Little dead material is found on the trees. Crowns are pointed or conical in shape. There is evidence of a diminished shrub understory.

Nonproductive Woodlands - Forest lands not qualified as having commercial or free-use products available due to multiple-use management constraints and/or, because of poor growing conditions or inaccessibility, will not allow a sustained removal of vegetation resources. These lands include old-growth (climax) stands or relatively even-aged mature stands where:

a. Stocking densities are generally less than 40% crown closure.
b. Slope gradients are greater than 35% (25% in granitic soils).
c. An absence of regeneration capability as evidenced by a lack of mixed age and height classes.
d. Soils are excessively rocky and landforms are typified by cliffs, rock ledges, and large boulders. Soils are generally shallow, with loamy to sandy texture.
e. There is an abundance of dead material on the trees. Trees are deformed and have rounded crowns. Understory shrub vegetation is generally lacking.

All woodland sites, regardless of age class and soil type, which lie within VRM Class I areas or wilderness study areas are to be considered “nonproductive woodland” zones because of multiple-use management constraints. VRM Class II areas within special recreation management areas are to be identified as restricted cutting zones where woodlands may receive limited cutting if done with a high level of visual sensitivity to protect recreation and scenic values. VRM Class III and IV areas are to be regarded as “productive woodland” zones, provided visually sensitive major travel corridors are taken into account.

Appendix FORS-2. Douglas-fir Habitat Type.

Douglas-fir habitat types (h.t.) are a system of classification of overstory vs. understory vegetation on forestlands. The habitat types that are found in the Owyhee Mountains are Douglas-fir/elksedge (Psme/Cage), Douglas-fir/Oregon grape (Psme/Bere), Douglas-fir/snowberry (Psme/Syor), Douglas-fir/mountain sweet-root (Psme/Osch), and Douglas-fir/mountain mahogany (Psme/Cele).

Psme/Cage h.t.(Douglas-fir/elksedge): Normally Carex geyeri (elksedge) dominates a depauperate undergrowth. Older trees are usually widely spaced and create a park-like appearance. Vegetation recovers slowly from disturbance. Natural Douglas-fir regeneration is often sporadic and apparently requires shade.

Psme/Bere h.t.(Douglas-fir/Oregon grape): Small amounts of aspen may be present, with mountain brush and sagebrush. Timber productivity potential is low to moderate. Overstory removal will stimulate development of tall shrub layer that is benefical to big game but may suppress conifer seedlings. Usually found on steep slopes.

Psme/Syor h.t.(Douglas-fir/common snowberry): Aspen are common in the smaller trees, with a low shrub understory. Timber productivity is usually low to moderate. If aspen is present, aspen may increase rapidly after conifers are removed. In some areas, the gentle slopes and relatively mild climate provide important wintering areas for big game.

Psme/Osch h.t.(Douglas-fir/mountain sweet-root): Slopes are generally moderate to steep, with northerly aspects. Normally Douglas-fir in the only conifer on these sites. Aspen and mountain brush will invade disturbed areas. Timber productivity is usually high, and will regenerate easily in shade of older trees.

Psme/Cele h.t.(Douglas-fir/mountain mahogany): Douglas-fir is usually the only conifer, with the trees often widely scattered and with an understory of mountain brush. Timber productivity is usually low to very low. Tree regeneration is very sporadic.

Allotment Management Summaries

Allotment Name:	Swisher Springs	Public Acres:	3,721
		Private Acres:	2
		State Acres:	0
Allotment Number:	0450	Total Acres:	3,723
		Total Preference:	537
Management Category:	Improve	Average Use:	328
		Active Preference:	345
		Suspended Nonuse:	192
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Dougal FFR	Public Acres:	867
		Private Acres:	2,619
		State Acres:	526
Allotment Number:	0456	Total Acres:	4,012
		Total Preference:	90
Management Category:	Improve	Average Use:	90
		Active Preference:	90
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Quintana FFR	Public Acres:	855
		Private Acres:	2,822
		State Acres:	0
Allotment Number:	0465	Total Acres:	3,677
		Total Preference:	38
Management Category:	Improve	Average Use:	38
		Active Preference:	38
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objective:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Name:	Stanford FFR
Allotment Number:	0470
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	40
Private Acres:	457
State Acres:	0
Total Acres:	497
Total Preference:	2
Average Use:	2
Active Preference:	2
Suspended Nonuse:	0

Resource Concerns:	Management Objective:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Name:	Joyce FFR	Public Acres:	353
		Private Acres:	1,584
		State Acres:	0
Allotment Number:	0487	Total Acres:	1,937
		Total Preference:	87
Management Category:	Improve	Average Use:	87
		Active Preference:	87
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Cliffs	Public Acres:	21,128
		Private Acres:	299
		State Acres:	366
Allotment Number:	0501	Total Acres:	21,793
		Total Preference:	2,455
Management Category:	Improve	Average Use:	1,652
		Active Preference:	1,932
		Suspended Nonuse:	523
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Outstanding Natural Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	Long Valley	Public Acres:	3,731
		Private Acres:	30
		State Acres:	0
Allotment Number:	0502	Total Acres:	3,761
		Total Preference:	1,084
Management Category:	Improve	Average Use:	463
		Active Preference:	800
		Suspended Nonuse:	284
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, river otter).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Flint Creek	Public Acres:	11,695
		Private Acres:	6,655
		State Acres:	949
Allotment Number:	0503	Total Acres:	19,299
		Total Preference:	2,474
Management Category:	Improve	Average Use:	1,724
		Active Preference:	2,474
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Jackson Creek	Public Acres:	4,825
		Private Acres:	851
		State Acres:	3,021
Allotment Number:	0506	Total Acres:	8,697
		Total Preference:	968
Management Category:	Improve	Average Use:	943
		Active Preference:	968
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Reynolds Creek
Allotment Number:	0508
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	35,628
Private Acres:	279
State Acres:	1,930
Total Acres:	37,837
Total Preference:	6,443
Average Use:	3,728
Active Preference:	4,066
Suspended Nonuse:	2,377

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (61%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (39%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Succor Creek	Public Acres:	12,510
		Private Acres:	886
		State Acres:	1,234
Allotment Number:	0511	Oregon Acres:	6
		Total Acres:	14,636
Management Category:	Improve	Total Preference:	1,703
		Average Use:	1,659
		Active Preference:	1,703
Geographic Reference:	Jordan Creek Area	Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Locatable Mineral Potential (Moderate).

Allotment Management Summaries

Allotment Name:	Elephant Butte	Public Acres:	8,253
		Private Acres:	2,301
		State Acres:	0
Allotment Number:	0513	Total Acres:	10,554
		Total Preference:	412
Management Category:	Improve	Average Use:	194
		Active Preference:	412
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (plant, ferruginous hawk, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Alkali-Wildcat
Allotment Number:	0514
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	6,432
Private Acres:	0
State Acres:	0
Total Acres:	6,432
Total Preference:	624
Average Use:	341
Active Preference:	624
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	Hardtrigger
Allotment Number:	0516
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	22,086
Private Acres:	2,525
State Acres:	1,221
Total Acres:	25,832
Total Preference:	2,044
Average Use:	1,892
Active Preference:	2,044
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (44%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (56%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Rabbit Creek-Peters Gulch
Allotment Number:	0517
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	31,017
Private Acres:	1,453
State Acres:	1,305
Total Acres:	33,775
Total Preference:	3,410
Average Use:	2,049
Active Preference:	2,181
Suspended Nonuse:	1,229

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, curlew, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (43%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (57%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Oregon National Historic Trail, Snake River Birds of Prey National Conservation Area).

Administrative special designation (Special Recreation Management Area, National Register District, Black Butte/Guffey Butte ACEC).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name: French John

Allotment Number: 0518

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres: 3,973
Private Acres: 0
State Acres: 0
Total Acres: 3,973

Total Preference: 1,349
Average Use: 1,166
Active Preference: 1,166
Suspended Nonuse: 173

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Strodes Basin
Allotment Number:	0519
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	9,998
Private Acres:	225
State Acres:	633
Oregon Acres:	4,015
Total Acres:	14,871
Total Preference:	2,229
Average Use:	854
Active Preference:	1,985
Suspended Nonuse:	244

Resource Concerns:	Management Objectives:
Special status species present (plant, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (39%).
	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (61%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Indian Meadows	Public Acres:	6,207
		Private Acres:	2,560
		State Acres:	10,596
Allotment Number:	0520	Total Acres:	19,363
		Total Preference:	735
Management Category:	Improve	Average Use:	881
		Active Preference:	735
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Sands Basin
Allotment Number:	0521
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	10,885
Private Acres:	1,411
State Acres:	1,268
Total Acres:	13,564
Total Preference:	999
Average Use:	950
Active Preference:	999
Suspended Nonuse:	9

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Rats Nest
Allotment Number:	0522
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	4,942
Private Acres:	17
State Acres:	633
Total Acres:	5,592
Total Preference:	787
Average Use:	509
Active Preference:	557
Suspended Nonuse:	230

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name: Chipmunk Field FFR

Allotment Number: 0523

Management Category: Improve

Geographic Reference: Jordan Creek Area

Public Acres: 596
Private Acres: 12,387
State Acres: 22
Total Acres: 13,005

Total Preference: 72
Average Use: 72
Active Preference: 72
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Garat Ind.

Allotment Number: 0524

Management Category: Improve

Geographic Reference: Owyhee River Area

Public Acres: 882
Private Acres: 235
State Acres: 0
Total Acres: 1,117

Total Preference: 80
Average Use: 80
Active Preference: 80
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area, Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Juniper Springs
Allotment Number:	0525
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	9,795
Private Acres:	166
State Acres:	5
Total Acres:	9,966
Total Preference:	1,715
Average Use:	1,809
Active Preference:	1,715
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Boulder Flat	Public Acres:	3,652
		Private Acres:	57
		State Acres:	835
Allotment Number:	0526	Total Acres:	4,544
		Total Preference:	344
Management Category:	Improve	Average Use:	247
		Active Preference:	344
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	State Line
Allotment Number:	0527
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	536
Private Acres:	0
State Acres:	0
Oregon Acres:	543
Total Acres:	1,079
Total Preference:	104
Average Use:	101
Active Preference:	104
Suspended Nonuse:	0

Resource Concerns:

Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).
Juniper encroachment exists.

High erosion potential.

Other wildlife considerations (sage grouse winter habitat, sage grouse leks).

Crucial big game winter habitat present (pronghorn antelope).

Management Objectives:

Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.

Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Locatable Mineral Potential (Moderate).

Allotment Management Summaries

Allotment Name:	Trout Creek Ind.	Public Acres:	3,294
		Private Acres:	86
		State Acres:	0
Allotment Number:	0529	Total Acres:	3,380
		Total Preference:	726
Management Category:	Improve	Average Use:	588
		Active Preference:	726
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Baxter Basin

Allotment Number: 0530

Management Category: Improve

Geographic Reference: Jordan Creek Area

Public Acres: 1,547
Private Acres: 0
State Acres: 0
Total Acres: 1,547

Total Preference: 299
Average Use: 331
Active Preference: 299
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Joint	Public Acres:	3,163
		Private Acres:	273
		State Acres:	934
Allotment Number:	0531	Total Acres:	4,370
		Total Preference:	1,089
Management Category:	Improve	Average Use:	1,095
		Active Preference:	1,089
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Hart Creek

Allotment Number: 0532

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres:	25,113
Private Acres:	1,811
State Acres:	1,895
Total Acres:	28,189
Total Preference:	3,573
Average Use:	1,769
Active Preference:	2,665
Suspended Nonuse:	908

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (28%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (72%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Box "T"
Allotment Number:	0534
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	7,767
Private Acres:	183
State Acres:	5
Total Acres:	7,955
Total Preference:	2,397
Average Use:	1,108
Active Preference:	1,774
Suspended Nonuse:	605

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Fossil Butte
Allotment Number:	0535
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	40,664
Private Acres:	3,205
State Acres:	1,900
Total Acres:	45,769
Total Preference:	1,653
Average Use:	1,410
Active Preference:	1,622
Suspended Nonuse:	31

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, ferruginous hawk, bald eagle, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Oregon National Historic Trail, Snake River Birds of Prey National Conservation Area).

Administrative special designation (Special Recreation Management Area, National Register District, Black Butte/Guffey Butte ACEC).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	Trout Springs	Public Acres:	29,178
		Private Acres:	1,628
		State Acres:	652
Allotment Number:	0539	Oregon Acres:	502
		Total Acres:	31,960
Management Category:	Improve	Total Preference:	5,166
		Average Use:	2,737
		Active Preference:	2,927
Geographic Reference:	Owyhee River Area	Suspended Nonuse:	2,239

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Bull Basin
Allotment Number:	0540
Management Category:	Improve
Geographic Reference:	Owyhee River Area

Public Acres:	49,070
Private Acres:	736
State Acres:	0
Total Acres:	49,806
Total Preference:	6,587
Average Use:	3,451
Active Preference:	3,932
Suspended Nonuse:	2,655

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area, Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name: Whitehorse-Antelope

Allotment Number: 0541

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres:	37,970
Private Acres:	1,354
State Acres:	2,469
Total Acres:	41,793
Total Preference:	4,405
Average Use:	4,066
Active Preference:	4,345
Suspended Nonuse:	1,110

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (69%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (31%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Ferris FFR
Allotment Number:	0545
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	974
Private Acres:	2,128
State Acres:	0
Total Acres:	3,102
Total Preference:	150
Average Use:	150
Active Preference:	150
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Pleasant Valley	Public Acres:	12,076
		Private Acres:	47
		State Acres:	267
Allotment Number:	0546	Total Acres:	12,390
		Total Preference:	927
Management Category:	Improve	Average Use:	945
		Active Preference:	927
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Battleground Boni	Public Acres:	35,875
		Private Acres:	2,249
		State Acres:	368
Allotment Number:	0548	Total Acres:	38,492
		Total Preference:	3,068
Management Category:	Improve	Average Use:	2,885
		Active Preference:	3,068
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Ben Mills	Public Acres:	5,145
		Private Acres:	455
		State Acres:	633
Allotment Number:	0549	Total Acres:	6,233
Management Category:	Improve	Total Preference:	718
		Average Use:	423
		Active Preference:	368
		Suspended Nonuse:	350
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Administrative special designation (Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Star Ranch	Public Acres:	8,266
		Private Acres:	126
		State Acres:	633
Allotment Number:	0550	Total Acres:	9,025
		Total Preference:	741
Management Category:	Improve	Average Use:	369
		Active Preference:	386
		Suspended Nonuse:	355
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Sheep Hills	Public Acres:	21,105
		Private Acres:	232
		State Acres:	20
Allotment Number:	0551	Total Acres:	21,357
		Total Preference:	2,085
Management Category:	Improve	Average Use:	1,227
		Active Preference:	1,271
		Suspended Nonuse:	814
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area, Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Glass Creek	Public Acres:	1,690
		Private Acres:	173
		State Acres:	0
Allotment Number:	0552	Total Acres:	1,863
		Total Preference:	139
Management Category:	Improve	Average Use:	166
		Active Preference:	139
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Gusman	Public Acres:	15,736
		Private Acres:	264
		State Acres:	1,206
Allotment Number:	0554	Total Acres:	17,206
		Total Preference:	3,674
Management Category:	Improve	Average Use:	2,243
		Active Preference:	2,371
		Suspended Nonuse:	1,304
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Shares Basin

Allotment Number: 0556

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres: 10,939
Private Acres: 1,688
State Acres: 620
Total Acres: 13,247

Total Preference: 2,139
Average Use: 1,711
Active Preference: 1,621
Suspended Nonuse: 518

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Trout Creek-Lequerica	Public Acres:	783
		Private Acres:	442
		State Acres:	0
Allotment Number:	0560	Total Acres:	1,225
		Total Preference:	115
Management Category:	Improve	Average Use:	115
		Active Preference:	115
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	South Mountain Area	Public Acres:	6,153
		Private Acres:	3,306
		State Acres:	8,100
Allotment Number:	0561	Total Acres:	17,559
		Total Preference:	745
Management Category:	Improve	Average Use:	758
		Active Preference:	745
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Cow Creek	Public Acres:	7,947
		Private Acres:	111
		State Acres:	0
Allotment Number:	0562	Total Acres:	8,058
		Total Preference:	1,214
Management Category:	Improve	Average Use:	1,203
		Active Preference:	1,214
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Graveyard Point

Allotment Number: 0568

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres: 3,294
Private Acres: 516
State Acres: 0
Total Acres: 3,810

Total Preference: 129
Average Use: 173
Active Preference: 129
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Special status species present (plant, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Silver City
Allotment Number:	0569
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	52,596
Private Acres:	8,473
State Acres:	2,819
Total Acres:	63,888
Total Preference:	9,709
Average Use:	5,870
Active Preference:	6,586
Suspended Nonuse:	2,123

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, curlew, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (61%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (39%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Snake River Birds of Prey National Conservation Area).

Administrative special designation (National Register District).

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Jump Creek
Allotment Number:	0570
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	8,698
Private Acres:	4,920
State Acres:	4,028
Total Acres:	17,646
Total Preference:	1,227
Average Use:	1,051
Active Preference:	1,227
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area, National Register District).

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name: Con Shea

Allotment Number: 0571

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres: 22,541
Private Acres: 1,245
State Acres: 457
Total Acres: 24,243

Total Preference: 1,668
Average Use: 1,410
Active Preference: 1,668
Suspended Nonuse: 0

Resource Concerns:

Special status species present (plant, ferruginous hawk, bald eagle, curlew, burrowing owl).

Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).
Noxious weeds present.

High erosion potential.

Management Objectives:

Manage special status species and habitats to increase or maintain populations. SPSS 1.

Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.

Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Oregon National Historic Trail, Snake River Birds of Prey National Conservation Area).

Administrative special designation (Special Recreation Management Area, National Register District, Black Butte/Guffey Butte ACEC).

Allotment Management Summaries

Allotment Name:	Burgess	Public Acres:	1,070
		Private Acres:	79
		State Acres:	7
Allotment Number:	0572	Oregon Acres:	213
		Total Acres:	1,369
Management Category:	Improve	Total Preference:	240
		Average Use:	248
		Active Preference:	240
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	West Antelope
Allotment Number:	0574
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	11,752
Private Acres:	104
State Acres:	27
Total Acres:	11,883
Total Preference:	3,489
Average Use:	1,581
Active Preference:	2,603
Suspended Nonuse:	886

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Miller FFR
Allotment Number:	0575
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	704
Private Acres:	3,583
State Acres:	0
Total Acres:	4,287
Total Preference:	54
Average Use:	54
Active Preference:	54
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Diamond Basin
Allotment Number:	0579
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	11,224
Private Acres:	1,992
State Acres:	640
Total Acres:	13,856
Total Preference:	2,239
Average Use:	1,189
Active Preference:	1,463
Suspended Nonuse:	776

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (52%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (48%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Louse Creek
Allotment Number:	0580
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	20,181
Private Acres:	5,263
State Acres:	2,036
Total Acres:	27,480
Total Preference:	3,084
Average Use:	2,031
Active Preference:	3,084
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	

Additional Management Considerations:

Administrative special designation (National Register District).

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Garat	Public Acres:	210,986
		Private Acres:	1,075
		State Acres:	8,975
Allotment Number:	0584	Total Acres:	221,036
		Total Preference:	33,646
Management Category:	Improve	Average Use:	16,170
		Active Preference:	33,646
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area), Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Brown's Creek	Public Acres:	3,973
		Private Acres:	32
		State Acres:	0
Allotment Number:	0585	Total Acres:	4,005
		Total Preference:	1,410
Management Category:	Improve	Average Use:	477
		Active Preference:	793
		Suspended Nonuse:	617
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Lone Tree	Public Acres:	7,114
		Private Acres:	237
		State Acres:	8,179
Allotment Number:	0587	Total Acres:	15,530
		Total Preference:	2,038
Management Category:	Improve	Average Use:	1,287
		Active Preference:	1,523
		Suspended Nonuse:	515
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Red Mountain

Allotment Number: 0588

Management Category: Improve

Geographic Reference: Snake River Area

Public Acres:	14,236
Private Acres:	42
State Acres:	645
Total Acres:	14,923
Total Preference:	3,578
Average Use:	1,328
Active Preference:	2,304
Suspended Nonuse:	1,274

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse Leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (46%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (54%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Boone Peak
Allotment Number:	0589
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	9,489
Private Acres:	4,826
State Acres:	657
Total Acres:	14,972
Total Preference:	2,876
Average Use:	968
Active Preference:	2,094
Suspended Nonuse:	782

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Bridge Creek	Public Acres:	2,701
		Private Acres:	15
Allotment Number:	0590	State Acres:	0
		Total Acres:	2,716
Management Category:	Improve	Total Preference:	885
		Average Use:	331
Geographic Reference:	Jordan Creek Area	Active Preference:	664
		Suspended Nonuse:	221

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	South Mountain Cooperative	Public Acres:	4,043
		Private Acres:	2,735
		State Acres:	12
		Total Acres:	6,790
Allotment Number:	0591	Total Preference:	492
		Average Use:	539
Management Category:	Improve	Active Preference:	492
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Combination Creek

Allotment Number: 0595

Management Category: Improve

Geographic Reference: Jordan Creek Area

Public Acres:	3,185
Private Acres:	62
State Acres:	2,170
Total Acres:	5,417
Total Preference:	410
Average Use:	453
Active Preference:	410
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Wroten	Public Acres:	1,621
		Private Acres:	408
		State Acres:	0
Allotment Number:	0597	Total Acres:	2,029
		Total Preference:	400
Management Category:	Improve	Average Use:	440
		Active Preference:	400
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Whitehorse Oregon-Idaho
Allotment Number:	0598
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	944
Private Acres:	7
State Acres:	0
Oregon Acres	2,029
Total Acres:	2,980
Total Preference:	234
Average Use:	255
Active Preference:	234
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Burghardt	Public Acres:	13,450
		Private Acres:	74
		State Acres:	5,876
Allotment Number:	0599	Total Acres:	19,400
		Total Preference:	1,583
Management Category:	Improve	Average Use:	1,287
		Active Preference:	1,583
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	South Mountain Individual
Allotment Number:	0600
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	3,739
Private Acres:	183
State Acres:	1,156
Total Acres:	5,078
Total Preference:	511
Average Use:	405
Active Preference:	511
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Louisa Creek	Public Acres:	9,840
		Private Acres:	675
		State Acres:	0
Allotment Number:	0601	Total Acres:	10,515
		Total Preference:	2,522
Management Category:	Improve	Average Use:	1,839
		Active Preference:	1,868
		Suspended Nonuse:	654
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Poison Creek	Public Acres:	5,414
		Private Acres:	40
		State Acres:	0
Allotment Number:	0603	Total Acres:	5,454
Management Category:	Improve	Total Preference:	761
		Average Use:	na
		Active Preference:	761
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Staples FFR	Public Acres:	257
		Private Acres:	128
		State Acres:	0
Allotment Number:	0610	Total Acres:	385
		Total Preference:	33
Management Category:	Improve	Average Use:	33
		Active Preference:	33
Geographic Reference:	Jordan Creek Area	Suspended Nonuse:	0

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Steiner FFR	Public Acres:	1,564
		Private Acres:	4,544
		State Acres:	1,248
Allotment Number:	0613	Total Acres:	7,356
		Total Preference:	98
Management Category:	Improve	Average Use:	98
		Active Preference:	98
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Jaca FFR	Public Acres:	650
		Private Acres:	1,641
		State Acres:	1,436
Allotment Number:	0624	Total Acres:	3,727
		Total Preference:	61
Management Category:	Improve	Average Use:	61
		Active Preference:	61
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Garrett FFR
Allotment Number:	0626
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	684
Private Acres:	1,796
State Acres:	655
Total Acres:	3,135
Total Preference:	31
Average Use:	31
Active Preference:	31
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	"45"
Allotment Number:	0629
Management Category:	Improve
Geographic Reference:	Owyhee River Area

Public Acres:	64,749
Private Acres:	84
State Acres:	2,530
Total Acres:	67,363
Total Preference:	2,217
Average Use:	2,106
Active Preference:	2,217
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area, Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Upper Deer Creek
Allotment Number:	0630
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	4,890
Private Acres:	129
State Acres:	0
Total Acres:	5,019
Total Preference:	787
Average Use:	761
Active Preference:	787
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Lower Deer Creek
Allotment Number:	0631
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	1,883
Private Acres:	650
State Acres:	0
Total Acres:	2,533
Total Preference:	126
Average Use:	97
Active Preference:	126
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Pole Creek
Allotment Number:	0635
Management Category:	Improve
Geographic Reference:	Owyhee River Area

Public Acres:	23,349
Private Acres:	1,077
State Acres:	633
Total Acres:	25,059
Total Preference:	1,468
Average Use:	1,258
Active Preference:	1,468
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Allotment Management Summaries

Allotment Name:	Castlehead-Lambert Table	Public Acres:	47,499
		Private Acres:	2
Allotment Number:	0634	State Acres:	635
		Total Acres:	48,136
Management Category:	Improve	Total Preference:	5,264
		Average Use:	3,254
Geographic Reference:	Owyhee River Area	Active Preference:	3,244
		Suspended Nonuse:	2,020

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area, Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name: Pole Creek

Allotment Number: 0635

Management Category: Improve

Geographic Reference: Owyhee River Area

Public Acres: 23,349
Private Acres: 1,077
State Acres: 633
Total Acres: 25,059

Total Preference: 1,468
Average Use: 1,258
Active Preference: 1,468
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Allotment Management Summaries

Allotment Name:	Owyhee (Nevada)	Public Acres:	0
		Private Acres:	0
		State Acres:	0
Allotment Number:	0636	Nevada Acres:	1,800
		Total Acres:	1,800
Management Category:	Improve	Total Preference:	80
		Average Use:	80
		Active Preference:	80
Geographic Reference:	Owyhee River Area	Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Alder Creek FFR	Public Acres:	618
		Private Acres:	1,317
		State Acres:	0
Allotment Number:	0639	Total Acres:	1,935
		Total Preference:	60
Management Category:	Improve	Average Use:	60
		Active Preference:	60
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Bachelor Flat FFR
Allotment Number:	0640
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	922
Private Acres:	1,070
State Acres:	203
Total Acres:	2,195
Total Preference:	127
Average Use:	127
Active Preference:	127
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Windy Point	Public Acres:	5,760
		Private Acres:	166
		State Acres:	363
Allotment Number:	0645	Total Acres:	6,289
		Total Preference:	456
Management Category:	Improve	Average Use:	401
		Active Preference:	456
		Suspended Nonuse:	289
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Canal
Allotment Number:	0646
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	744
Private Acres:	0
State Acres:	3,793
Total Acres:	4,537
Total Preference:	48
Average Use:	48
Active Preference:	48
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Special status species present (curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	East Reynolds
Allotment Number:	0651
Management Category:	Improve
Geographic Reference:	Snake River Area

Public Acres:	28,410
Private Acres:	489
State Acres:	2,041
Total Acres:	30,940
Total Preference:	2,845
Average Use:	1,140
Active Preference:	1,798
Suspended Nonuse:	1,047

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, curlew, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Wild Horse Herd Management Area present.	Maintain wild and free-roaming horses at appropriate management levels. WHRS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1 (42%). Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2 (58%).
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	Soda Creek
Allotment Number:	0652
Management Category:	Improve
Geographic Reference:	Jordan Creek Area

Public Acres:	4,290
Private Acres:	6,146
State Acres:	3,025
Total Acres:	13,461
Total Preference:	501
Average Use:	772
Active Preference:	501
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Nickel Creek FFR
Allotment Number:	0657
Management Category:	Improve
Geographic Reference:	Owyhee River Area

Public Acres:	1,685
Private Acres:	6,323
State Acres:	329
Total Acres:	8,337
Total Preference:	109
Average Use:	109
Active Preference:	109
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists. Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Allotment Management Summaries

Allotment Name:	Louse Creek FFR	Public Acres:	1,969
		Private Acres:	1,918
		State Acres:	77
Allotment Number:	0658	Total Acres:	3,964
		Total Preference:	219
Management Category:	Improve	Average Use:	219
		Active Preference:	219
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Name:	Tent Creek	Public Acres:	59,300
		Private Acres:	232
		State Acres:	2,570
Allotment Number:	0661	Total Acres:	62,102
		Total Preference:	1,700
Management Category:	Improve	Average Use:	1,733
		Active Preference:	1,700
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Special status species present (plant, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area).

Administrative special designation (Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Gluch FFR	Public Acres:	687
		Private Acres:	47
		State Acres:	0
Allotment Number:	0466	Oregon Acres:	1,448
		Total Acres:	2,182
Management Category:	Maintain	Total Preference:	105
		Average Use:	105
		Active Preference:	105
Geographic Reference:	Jordan Creek Area	Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Name:	Gusman FFR	Public Acres:	247
		Private Acres:	2,684
		State Acres:	25
Allotment Number:	0467	Total Acres:	2,956
		Total Preference:	26
Management Category:	Maintain	Average Use:	26
		Active Preference:	26
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Morgan Ind.	Public Acres:	4,762
		Private Acres:	257
		State Acres:	534
Allotment Number:	0505	Total Acres:	5,553
		Total Preference:	446
Management Category:	Maintain	Average Use:	497
		Active Preference:	446
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Palmer	Public Acres:	1,730
		Private Acres:	635
		State Acres:	633
Allotment Number:	0507	Total Acres:	2,998
		Total Preference:	439
Management Category:	Maintain	Average Use:	420
		Active Preference:	439
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Boulder Flat Ind.	Public Acres:	1,418
		Private Acres:	0
		State Acres:	0
Allotment Number:	0509	Total Acres:	1,418
		Total Preference:	169
Management Category:	Maintain	Average Use:	170
		Active Preference:	169
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objective:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Pole Bridge Creek	Public Acres:	474
		Private Acres:	158
		State Acres:	0
Allotment Number:	0510	Total Acres:	632
Management Category:	Maintain	Total Preference:	56
		Average Use:	56
		Active Preference:	56
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Blackstock Springs	Public Acres:	12,847
		Private Acres:	3,230
		State Acres:	1,300
Allotment Number:	0515	Total Acres:	17,377
		Total Preference:	2,057
Management Category:	Maintain	Average Use:	2,066
		Active Preference:	2,057
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	North Castle	Public Acres:	2,125
		Private Acres:	94
		State Acres:	0
Allotment Number:	0533	Total Acres:	2,219
		Total Preference:	708
Management Category:	Maintain	Average Use:	541
		Active Preference:	531
		Suspended Nonuse:	177
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	South Dougal	Public Acres:	4,169
		Private Acres:	74
		State Acres:	0
Allotment Number:	0536	Total Acres:	4,243
		Total Preference:	627
Management Category:	Maintain	Average Use:	362
		Active Preference:	374
		Suspended Nonuse:	253
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Wilson Creek FFR	Public Acres:	843
		Private Acres:	2,249
		State Acres:	0
Allotment Number:	0537	Total Acres:	3,092
		Total Preference:	79
Management Category:	Maintain	Average Use:	79
		Active Preference:	79
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Feltwell	Public Acres:	897
		Private Acres:	714
		State Acres:	0
Allotment Number:	0544	Total Acres:	1,611
		Total Preference:	279
Management Category:	Maintain	Average Use:	279
		Active Preference:	279
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Gluch	Public Acres:	250
		Private Acres:	20
		State Acres:	0
Allotment Number:	0553	Total Acres:	270
		Total Preference:	50
Management Category:	Maintain	Average Use:	50
		Active Preference:	50
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Madriaga	Public Acres:	4,050
		Private Acres:	280
		State Acres:	0
Allotment Number:	0557	Total Acres:	4,330
		Total Preference:	785
Management Category:	Maintain	Average Use:	785
		Active Preference:	785
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Other wildlife considerations (sage grouse winter habitat, sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Franconi	Public Acres:	709
		Private Acres:	1,579
		State Acres:	0
Allotment Number:	0558	Total Acres:	2,288
		Total Preference:	120
Management Category:	Maintain	Average Use:	120
		Active Preference:	120
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Sheep Creek
Allotment Number:	0559
Management Category:	Maintain
Geographic Reference:	Jordan Creek Area

Public Acres:	605
Private Acres:	939
State Acres:	30
Total Acres:	1,574
Total Preference:	68
Average Use:	68
Active Preference:	68
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Old Man	Public Acres:	907
		Private Acres:	10
		State Acres:	0
Allotment Number:	0564	Total Acres:	917
		Total Preference:	115
Management Category:	Maintain	Average Use:	115
		Active Preference:	115
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Rockville	Public Acres:	13,260
		Private Acres:	57
		State Acres:	623
Allotment Number:	0565	Total Acres:	13,940
		Total Preference:	2,288
Management Category:	Maintain	Average Use:	2,493
		Active Preference:	2,288
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (pronghorn antelope).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	W Maher FFR	Public Acres:	917
		Private Acres:	890
		State Acres:	0
Allotment Number:	0567	Total Acres:	1,807
Management Category:	Maintain	Total Preference:	120
		Average Use:	120
		Active Preference:	120
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Jim's Peak FFR	Public Acres:	1,068
		Private Acres:	1,520
		State Acres:	42
Allotment Number:	0576	Total Acres:	2,630
		Total Preference:	56
Management Category:	Maintain	Average Use:	56
		Active Preference:	56
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Sinker Butte

Allotment Number: 0578

Management Category: Maintain

Geographic Reference: Snake River Area

Public Acres: 7,253
Private Acres: 378
State Acres: 0
Total Acres: 7,631

Total Preference: 707
Average Use: 1,144
Active Preference: 707
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bald eagle, curlew).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Oregon National Historic Trail, Snake River Birds of Prey National Conservation Area).

Administrative special designation (Special Recreation Management Area, National Register District, Black Butte/Guffey Butte ACEC).

Allotment Management Summaries

Allotment Name:	Tippen Homestead
Allotment Number:	0586
Management Category:	Maintain
Geographic Reference:	Jordan Creek Area

Public Acres:	818
Private Acres:	1,616
State Acres:	0
Total Acres:	2,434
Total Preference:	300
Average Use:	225
Active Preference:	225
Suspended Nonuse:	75

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Jordan Valley	Public Acres:	220
		Private Acres:	72
		State Acres:	0
Allotment Number:	0592	Total Acres:	292
		Total Preference:	30
Management Category:	Maintain	Average Use:	30
		Active Preference:	30
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Crutcher's Crossing	Public Acres:	2,815
		Private Acres:	0
		State Acres:	0
Allotment Number:	0593	Total Acres:	2,815
		Total Preference:	0
Management Category:	Maintain	Average Use:	0
		Active Preference:	0
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Special status species present (plant, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Congressional special designation (Wilderness Study Area, Wild and Scenic River).

Administrative special designation (Special Recreation Management Area), Bighorn Sheep Habitat ACEC).

Allotment Management Summaries

Allotment Name:	Big Field FFR
Allotment Number:	0594
Management Category:	Maintain
Geographic Reference:	Jordan Creek Area

Public Acres:	897
Private Acres:	1,698
State Acres:	0
Total Acres:	2,595
Total Preference:	168
Average Use:	147
Active Preference:	147
Suspended Nonuse:	21

Resource Concerns:	Management Objectives:
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Administrative special designation (Outstanding Natural Area).

Allotment Management Summaries

Allotment Name:	Warn Ind.	Public Acres:	702
		Private Acres:	0
		State Acres:	0
Allotment Number:	0596	Total Acres:	702
		Total Preference:	74
Management Category:	Maintain	Average Use:	111
		Active Preference:	74
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Tyson FFR	Public Acres:	672
		Private Acres:	3,479
		State Acres:	2,891
Allotment Number:	0616	Total Acres:	7,042
		Total Preference:	69
Management Category:	Maintain	Average Use:	69
		Active Preference:	69
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Locatable Mineral Potential (High).

Allotment Management Summaries

Allotment Name:	Burghardt FFR
Allotment Number:	0625
Management Category:	Maintain
Geographic Reference:	Owyhee River Area

Public Acres:	638
Private Acres:	2,666
State Acres:	457
Total Acres:	3,761
Total Preference:	60
Average Use:	60
Active Preference:	60
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	North Florence Springs	Public Acres:	521
		Private Acres:	64
		State Acres:	0
Allotment Number:	0643	Total Acres:	585
		Total Preference:	184
Management Category:	Maintain	Average Use:	184
		Active Preference:	184
		Suspended Nonuse:	61
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	West Castle	Public Acres:	9,400
		Private Acres:	571
		State Acres:	0
Allotment Number:	0648	Total Acres:	9,971
		Total Preference:	816
Management Category:	Maintain	Average Use:	0
		Active Preference:	861
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral).	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Allotment Management Summaries

Allotment Name:	Indian Creek	Public Acres:	596
		Private Acres:	1,950
		State Acres:	2,624
Allotment Number:	0649	Total Acres:	5,170
		Total Preference:	45
Management Category:	Maintain	Average Use:	23
		Active Preference:	45
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Stone	Public Acres:	791
		Private Acres:	0
		State Acres:	10
Allotment Number:	0650	Total Acres:	801
		Total Preference:	61
Management Category:	Maintain	Average Use:	61
		Active Preference:	61
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Administrative special designation (Special Recreation Management Area).

Off-Highway Motorized Vehicle (OHMV) or nonmotorized recreation activities present.

Allotment Management Summaries

Allotment Name:	Sage Hen	Public Acres:	1,703
		Private Acres:	20
		State Acres:	0
Allotment Number:	0660	Total Acres:	1,723
		Total Preference:	183
Management Category:	Maintain	Average Use:	200
		Active Preference:	183
		Suspended Nonuse:	112
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Ecological condition unsatisfactory (more than 10% early seral or less than 40% late seral). Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Hanley FFR	Public Acres:	119
		Private Acres:	623
		State Acres:	0
Allotment Number:	0453	Total Acres:	742
		Total Preference:	7
Management Category:	Custodial	Average Use:	7
		Active Preference:	7
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:

Management Objective:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Anderson FFR	Public Acres:	670
		Private Acres:	1,097
		State Acres:	0
Allotment Number:	0454	Total Acres:	1,767
		Total Preference:	12
Management Category:	Custodial	Average Use:	12
		Active Preference:	121
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Payne FFR	Public Acres:	96
		Private Acres:	848
		State Acres:	0
Allotment Number:	0455	Total Acres:	944
		Total Preference:	12
Management Category:	Custodial	Average Use:	12
		Active Preference:	12
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	McKay FFR	Public Acres:	27
		Private Acres:	773
		State Acres:	0
Allotment Number:	0457	Total Acres:	800
		Total Preference:	2
Management Category:	Custodial	Average Use:	2
		Active Preference:	2
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objective:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Josephine FFR	Public Acres:	378
		Private Acres:	2,392
		State Acres:	119
Allotment Number:	0458	Total Acres:	2,889
		Total Preference:	20
Management Category:	Custodial	Average Use:	20
		Active Preference:	20
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Munro FFR	Public Acres:	96
		Private Acres:	514
Allotment Number:	0461	State Acres:	0
		Total Acres:	610
Management Category:	Custodial	Total Preference:	15
		Average Use:	15
Geographic Reference:	Jordan Creek Area	Active Preference:	15
		Suspended Nonuse:	0

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Jordan Creek FFR	Public Acres:	217
		Private Acres:	937
		State Acres:	20
Allotment Number:	0463	Total Acres:	1,174
		Total Preference:	41
Management Category:	Custodial	Average Use:	41
		Active Preference:	41
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Chimney Pot FFR	Public Acres:	25
		Private Acres:	1,260
		State Acres:	0
Allotment Number:	0464	Total Acres:	1,285
		Total Preference:	4
Management Category:	Custodial	Average Use:	4
		Active Preference:	4
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	State Line FFR	Public Acres:	10
		Private Acres:	119
		State Acres:	0
Allotment Number:	0471	Total Acres:	129
		Total Preference:	3
Management Category:	Custodial	Average Use:	3
		Active Preference:	3
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Texas Basin FFR	Public Acres:	136
		Private Acres:	1,829
		State Acres:	0
Allotment Number:	0472	Total Acres:	1,965
Management Category:	Custodial	Total Preference:	5
		Average Use:	5
		Active Preference:	5
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Lequerica FFR	Public Acres:	128
		Private Acres:	880
		State Acres:	0
Allotment Number:	0473	Total Acres:	1,008
		Total Preference:	11
Management Category:	Custodial	Average Use:	11
		Active Preference:	11
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Bush Ranch FFR	Public Acres:	235
		Private Acres:	959
		State Acres:	0
Allotment Number:	0476	Total Acres:	1,194
Management Category:	Custodial	Total Preference:	25
		Average Use:	25
		Active Preference:	25
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Lowry FFR	Public Acres:	52
		Private Acres:	237
		State Acres:	0
Allotment Number:	0477	Total Acres:	289
		Total Preference:	6
Management Category:	Custodial	Average Use:	6
		Active Preference:	6
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Gaging Station FFR	Public Acres:	74
		Private Acres:	425
		State Acres:	0
		Total Acres:	499
Allotment Number:	0479		
Management Category:	Custodial	Total Preference:	4
		Average Use:	4
		Active Preference:	4
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:

Management Objective:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Quicksilver FFR	Public Acres:	141
		Private Acres:	2,488
		State Acres:	647
Allotment Number:	0483	Total Acres:	3,276
		Total Preference:	12
Management Category:	Custodial	Average Use:	12
		Active Preference:	12
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Reynolds Creek FFR	Public Acres:	77
		Private Acres:	445
		State Acres:	0
Allotment Number:	0485	Total Acres:	522
		Total Preference:	4
Management Category:	Custodial	Average Use:	4
		Active Preference:	4
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Murphy FFR	Public Acres:	94
		Private Acres:	264
		State Acres:	0
Allotment Number:	0486	Total Acres:	358
		Total Preference:	5
Management Category:	Custodial	Average Use:	5
		Active Preference:	5
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (curlew, burrowing owl).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Meadow Creek FFR	Public Acres:	356
		Private Acres:	119
Allotment Number:	0491	State Acres:	0
		Total Acres:	475
Management Category:	Custodial	Total Preference:	47
		Average Use:	47
Geographic Reference:	Jordan Creek Area	Active Preference:	47
		Suspended Nonuse:	0

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Stanford FFR	Public Acres:	96
		Private Acres:	1,287
		State Acres:	0
Allotment Number:	0543	Total Acres:	1,383
		Total Preference:	17
Management Category:	Custodial	Average Use:	17
		Active Preference:	17
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout)	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Pleasant Valley FFR	Public Acres:	1,735
		Private Acres:	3,173
		State Acres:	618
Allotment Number:	0547	Total Acres:	5,526
Management Category:	Custodial	Total Preference:	93
		Average Use:	93
		Active Preference:	93
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Coal Mine FFR	Public Acres:	410
		Private Acres:	0
		State Acres:	0
Allotment Number:	0566	Total Acres:	410
		Total Preference:	56
Management Category:	Custodial	Average Use:	56
		Active Preference:	56
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Bogus Creek FFR	Public Acres:	227
		Private Acres:	25
		State Acres:	6,786
Allotment Number:	0577	Total Acres:	7,038
		Total Preference:	24
Management Category:	Custodial	Average Use:	24
		Active Preference:	24
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Goose Creek FFR	Public Acres:	208
		Private Acres:	0
		State Acres:	596
Allotment Number:	0582	Total Acres:	804
		Total Preference:	43
Management Category:	Custodial	Average Use:	43
		Active Preference:	43
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Other wildlife considerations (sage grouse leks).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Corral Creek FFR	Public Acres:	64
		Private Acres:	232
		State Acres:	0
Allotment Number:	0602	Total Acres:	296
		Total Preference:	9
Management Category:	Custodial	Average Use:	9
		Active Preference:	9
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Walker FFR	Public Acres:	213
		Private Acres:	376
		State Acres:	0
Allotment Number:	0604	Total Acres:	589
		Total Preference:	16
Management Category:	Custodial	Average Use:	16
		Active Preference:	16
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name: Moore FFR

Allotment Number: 0606

Management Category: Custodial

Geographic Reference: Jordan Creek Area

Public Acres: 353
Private Acres: 479
State Acres: 91
Total Acres: 923

Total Preference: 48
Average Use: 51
Active Preference: 48
Suspended Nonuse: 0

Resource Concerns:	Management Objectives:
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Baltzor FFR	Public Acres:	403
		Private Acres:	1,821
		State Acres:	0
Allotment Number:	0607	Total Acres:	2,224
		Total Preference:	75
Management Category:	Custodial	Average Use:	75
		Active Preference:	75
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Stanford FFR	Public Acres:	563
		Private Acres:	1,287
		State Acres:	0
Allotment Number:	0608	Total Acres:	1,850
		Total Preference:	114
Management Category:	Custodial	Average Use:	114
		Active Preference:	114
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Berrett FFR
Allotment Number:	0609
Management Category:	Custodial
Geographic Reference:	Jordan Creek Area

Public Acres:	867
Private Acres:	3,301
State Acres:	1,947
Total Acres:	6,115
Total Preference:	114
Average Use:	98
Active Preference:	114
Suspended Nonuse:	0

Resource Concerns:	Management Objectives:
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
State of Idaho water quality designated beneficial uses not fully supported.	Meet or exceed State of Idaho water quality standards. WATR 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Squaw Creek FFR	Public Acres:	558
		Private Acres:	887
		State Acres:	0
Allotment Number:	0611	Total Acres:	1,445
		Total Preference:	35
Management Category:	Custodial	Average Use:	35
		Active Preference:	35
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	R Collins FFR	Public Acres:	106
		Private Acres:	309
		State Acres:	0
Allotment Number:	0612	Total Acres:	415
		Total Preference:	24
Management Category:	Custodial	Average Use:	24
		Active Preference:	24
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Johnstone FFR	Public Acres:	371
		Private Acres:	4,258
		State Acres:	672
Allotment Number:	0618	Total Acres:	5,301
Management Category:	Custodial	Total Preference:	52
		Average Use:	52
		Active Preference:	52
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Evans FFR	Public Acres:	731
		Private Acres:	3,944
		State Acres:	546
Allotment Number:	0619	Total Acres:	5,221
		Total Preference:	84
Management Category:	Custodial	Average Use:	84
		Active Preference:	84
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Bass FFR	Public Acres:	158
		Private Acres:	1,164
		State Acres:	0
Allotment Number:	0620	Total Acres:	1,322
		Total Preference:	26
Management Category:	Custodial	Average Use:	26
		Active Preference:	26
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Noxious weeds present.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Mason FFR	Public Acres:	168
		Private Acres:	672
		State Acres:	0
Allotment Number:	0621	Total Acres:	840
		Total Preference:	25
Management Category:	Custodial	Average Use:	25
		Active Preference:	25
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Special status species present (plant).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Name:	Bull Basin FFR	Public Acres:	106
		Private Acres:	141
		State Acres:	0
Allotment Number:	0623	Total Acres:	247
		Total Preference:	32
Management Category:	Custodial	Average Use:	32
		Active Preference:	32
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:	Management Objectives:
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout, bighorn sheep).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Rail Creek FFR	Public Acres:	109
		Private Acres:	1,871
		State Acres:	1,025
Allotment Number:	0627	Total Acres:	3,005
		Total Preference:	13
Management Category:	Custodial	Average Use:	13
		Active Preference:	13
		Suspended Nonuse:	1,871
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Kershner FFR	Public Acres:	257
		Private Acres:	586
		State Acres:	0
Allotment Number:	0632	Total Acres:	843
		Total Preference:	11
Management Category:	Custodial	Average Use:	11
		Active Preference:	11
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Juniper encroachment exists.	Achieve an ecological site condition of at least 40% in late seral stage and no more than 10% in early seral stage on lands above 3,500. VEGE 1.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Swisher FFR	Public Acres:	161
		Private Acres:	640
		State Acres:	0
Allotment Number:	0637	Total Acres:	801
		Total Preference:	15
Management Category:	Custodial	Average Use:	15
		Active Preference:	15
		Suspended Nonuse:	0
Geographic Reference:	Owyhee River Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Name:	Burgess FFR	Public Acres:	232
		Private Acres:	479
		State Acres:	0
Allotment Number:	0638	Total Acres:	711
		Total Preference:	11
Management Category:	Custodial	Average Use:	11
		Active Preference:	11
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Other wildlife considerations (sage grouse winter habitat).	Maintain/improve habitat to sustain desirable populations of upland game. WDLF 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Stahle FFR	Public Acres:	188
		Private Acres:	623
		State Acres:	0
Allotment Number:	0641	Total Acres:	811
Management Category:	Custodial	Total Preference:	35
		Average Use:	35
		Active Preference:	35
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Juniper encroachment exists.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. VEGE 2.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Montini FFR	Public Acres:	2,244
		Private Acres:	1,011
		State Acres:	299
Allotment Number:	0654	Total Acres:	3,554
		Total Preference:	140
Management Category:	Custodial	Average Use:	140
		Active Preference:	140
		Suspended Nonuse:	0
Geographic Reference:	Snake River Area		

Resource Concerns:	Management Objectives:
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (plant, redband trout).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
High erosion potential.	Establish and maintain upward vegetative trend and raise the seral stage by one class on at least 10% of the lands below 3,500. SOIL 2.

Additional Management Considerations:

Congressional special designation (Oregon National Historic Trail, Snake River Birds of Prey National Conservation Area).

Administrative special designation (Special Recreation Management Area), National Register District, Black Butte/Guffey Butte ACEC).

Allotment Management Summaries

Allotment Name:	Howl Creek FFR	Public Acres:	161
		Private Acres:	1,433
		State Acres:	435
Allotment Number:	0655	Total Acres:	2,029
		Total Preference:	12
Management Category:	Custodial	Average Use:	12
		Active Preference:	12
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:

Management Objectives:

Additional Management Considerations:

Allotment Management Summaries

Allotment Name:	Walt's Pond FFR	Public Acres:	1,384
		Private Acres:	2,088
		State Acres:	10
Allotment Number:	0659	Total Acres:	3,482
Management Category:	Custodial	Total Preference:	76
		Average Use:	76
		Active Preference:	76
		Suspended Nonuse:	0
Geographic Reference:	Jordan Creek Area		

Resource Concerns:	Management Objectives:
High erosion potential.	Improve or maintain watershed condition and soil productivity on lands above 3,500. SOIL 1.
Riparian ecosystems in unsatisfactory condition.	Improve all unsatisfactory, nonfunctioning and functional-at risk and maintain all satisfactory and proper functioning riparian areas. RIPN 1.
Special status species present (bald eagle).	Manage special status species and habitats to increase or maintain populations. SPSS 1.
Crucial big game winter habitat present (mule deer).	Maintain/improve habitat to sustain desirable populations of big game species. WDLF 1.

Additional Management Considerations:

Appendix FIRE-1. Prescribed Fire Management Plan.

I. Objectives:

1. Reduce the current extent of seral juniper encroachment on selected shrub and grass ecological sites.
2. Improve the ecological condition of native plant communities on selected sites by increasing biodiversity and productivity on native shrub and grasses.
3. Minimize impacts to scenic quality and recreation opportunities.
4. Ensure the protection of natural landscape features of WSA's, ACEC's, and SRMA's.
5. Maintain, improve or meet other resource objectives, such as wildlife, watershed, or range.

II. General Description:

Over 40 different soil types are found in the resource area. Four vegetation communities with approximately 20 soil types are discussed, for fire activities. The four communities are: (a) Wyoming, basin, and mountain big sagebrush communities, (b) Low sagebrush - bunchgrass communities, (c) Woodland communities, (d) Wet meadow/Riparian communities.
See Appendix Fire-2 for additional information on these communities.

III. Requirements for Prescribed Fire are:

1. Weather Range: Temperature, Relative Humidity, Wind direction, Wind speed, Flame Length, and Burning Index.

2. Vegetation:

(a) 75% of all prescribed fire will be in the loamy soils, with the three main big sagebrush communities, treating mostly juniper encroachment, and some over-mature sagebrush communities.

(b) 25% of the remaining prescribed fire acreage will be in a few, other soils within the low sagebrush communities and in the woodland communities. Only a minor amount of acreage of prescribed fire would be in the meadow-riparian communities.

(c) Generally, no prescribed fire will be allowed in climax (old-growth) juniper sites. Exceptions would be small (> 5 acres) rock outcrops, and peripheral areas of climax sites where removal of juniper would encourage release of suppressed mtn. mahogany or bitterbrush understories.

(d) Ecological conditions: (1) density of 1 plant per 10 sq. ft. ground cover, and (2) at least 500-600 pounds per acre.

3. Soil:

(a) Wind Erodibility Groups (WEG) are classes of soils defined on the basis of texture and soil erodibility values. Ranges of classes are 1 thru 8, with classes 1 thru 4 being most susceptible. Classes 1 thru 4 are to be avoided.

(b) Soil erodibility factor (K factor) of greater than .43 should be avoided.

(c) Prescribed fire will be limited to topography where slope in 35% or less. 25% or less on granitic soils.

4. Watershed:
Limited prescribed fire will be allowed within a 200 foot buffer zone along perennial and major intermittent streams to meet multiple-use objectives only in younger age class juniper stands.

5. Wildlife:
(a) A ratio of 60/40, forage to cover, would be established for mule deer habitat.
(b) Generally, most prescribed fire would not exceed one-fouth (1/4) mile in width. Optimum design would retain continuous areas of interconnected brush or juniper cover 600 to 1200 feet wide.
(c) Restrict prescribed fire to protect habitat in the Boulder Creek and the Red Basin Crucial mule deer winter/spring ranges.
(d) For antelope habitat, limit to 1,000 acres, and maintain cover to 5-20%.
(e) Nesting habitat for sage grouse should be maintained to about 20-30% sagebrush canopy cover.
(f) In brood-rearing areas for sage grouse, the sagebrush canopy cover should not be reduced to less than 10%.

6. Recreation:
Restrict prescribed fire to protect natural character and scenic quality of the Boulder Creek Natural Area and North Fork Owyhee Backcountry Area.

7. Air Quality:
Restrictions are 3,000 acres or less within 72 hours.

8. ACEC's:
Manage prescribed fire in accordance with the management actions identified for specific ACECs.

9. Roads:
Limit prescribed fire on major roads to at least 100 yards on each side of the road.

Appendix FIRE-2. Vegetation Communities for Prescribed Fire.

Listed below are those communities and the important (>10% representation) ecological range sites associated with each.

Vegetation Community	Corresponding Ecological Sites	Common Species in Communities
Big Sagebrush	Sandy Loam 8-12"	* Wy. big sagebrush, Indian ricegrass, needle and thread grass, squirreltail.
	Loamy 7-10"	Wy. big sagebrush, Thurber's needlegrass, tapertip hawksbeard, spiney hopsage.
	Loam 10-13"	Wy. big sagebrush, bluebunch wheatgrass, sandberg bluegrass, lupine
	Loam 13-16"	mountain big sagebrush, bluebunch wheatgrass, Idaho fescue, lupine.
	Loamy 16"*	mountain big sage, Idaho fescue, mountain brome, lupine.
	Loamy 11-13"	basin sagebrush, bluebunch wheatgrass
	Loamy 12-16"	basin big sagebrush, bluebunch wheatgrass, Idaho fescue, balsam root
Low Sagebrush	Very shallow stony loam 10-14"	low sage, sandberg bluegrass
	Shallow claypan 11-13"	low sage, Idaho fescue, bluebunch wheatgrass, phlox, lupine
	Shallow claypan 12-16"	low sage, Idaho fescue, bluebunch wheatgrass, phlox, lupine
	Mountain Ridge 14-18"	low sage, Idaho fescue, sandberg bluegrass, phlox
Woodland	Shallow Breaks 14-18"	western juniper, Idaho fescue, needlegrass, mountain mahogany
	Aspen 16"*	quaking aspen, sedge, bluegrass, mountain brome, snowberry
	Aspen thicket 16-22"	quaking aspen, sedge, bluegrass, mountain brome, snowberry
	Douglas fir 22*	Douglas fir, sub-alpine fir, sedge, snowberry, Oregon grape
	Mountain Brush 16*	mountain big sage, ceanothus, snowberry, mountain brome, ribes, cherry, rose
	Mahogany Savanna 16-22"	curlleaf mountain mahogany, snowberry, Idaho fescue needlegrass
Meadow/ Riparian	Semi-Wet Meadow 12-18"	sedge, rush, big bluegrass, iris, cinquefoil, willow
	Wet Meadow 18*	sedge, big bluegrass, rush, cinquefoil, iris, willow
	Riparian 7-20*	cottonwood, aspen, willow, bluegrass, sedge, rush

* Annual precipitation, not soil depth.

Appendix FIRE-3. Wilderness Study Area Fire Management Plan.

I. Objectives:

1. To preserve the area's ecological balance.
2. To allow fire as a nature part of the environment.
3. To establish both the degree and type of suppression techniques acceptable within these areas.

II. General Description:

Approximately 294,740 acres of wilderness study areas are in the Owyhee Resource Area. Refer to Chapter 3 for information on wilderness study areas, vegetation, soils, wildlife, fire history, etc.

III. Fire Behavior:

Refer to Fire Management section, Chapter 3.

IV. Role of Fire in the Ecosystem:

Refer to Fire Management section, Chapter 3.

V. Fire Management Areas:

1. Boundary Fire Management Zone - all lands one mile inside each WSA. Fires may be classified as non-suppression or suppression. Classification could change with weather or fire intensity. All fires will be classified according to fire situation analysis.
2. Interior Fire Management Zone - fires within WSA's, and not included in boundary classification fires. All fires will be allowed to burn naturally unless they threaten life or private property. Fires that spread into boundary zones could be reclassified depending on fire situation analysis.

VI. Fire Procedures:

This procedure will be followed when a fire is reported in or near a WSA:

1. Aerial reconnaissance will be flown to gather on-site data for situation analysis. This data will include:
   (a) fuel type and continuity
   (b) escape potential
   (c) location with map
   (d) spotting potential
   (e) natural barriers
   (f) topography
2. Other information for situation analysis include:
   (a) burning index
   (b) weather (present & predicted)
   (c) wind (speed & direction)
3. Situation analysis will be prepared by fire staff, and representative of area staff, if available.

VII. Total Point Value (TPV) and Classification:

0-90	Non-suppression
90-130	Monitoring
130+	Suppression

SeeA3FIRE4 for additional information.

VIII. District Manager will be contacted for signature and approval of selected alternative.

IX. Suppression Restrictions:

Heavy equipment will not be used without site-specific approval by Area Manager, and then only if needed to prevent loss of human life or property. Retardant, power saws and helicopters can be used for fire suppression if necessary.

Appendix FIRE-4. Wilderness Study Area Fire Management Plan - Fire Situationo Analysis.

The fire situation analysis is prepared by the District Fire Management Officer or his authorized representative and a representative of the area staff if one is available. The analysis is based on current and predicted weather and a point system designed to help the manager classify each fire (suppression or non-suppression). When a decision has been made, alternate action plans will be prepared and an alternative selected. This alternative will establish the guidelines for managing the fire. The following format will be used in the preparation of the fire situation analysis:

Fire Size	**Points Assigned**
0 - .25 acres	0
.26 - 9 acres	5
10 - 99 acres	10
100 - 299 acres	20
299 - above	30

Burning Index	**Points Assigned**
0 - 28	0
28 - 38	10
39 - 79	20
79 - above	30

Proximity to Boundary of Fire Management Area	**Points Assigned**
0 - .25 miles	30
.26 - .50 miles	20
.51 - .75 miles	10
.76 - 1.0 miles	5
1.0 miles or more	0

Wind Direction (Present & Predicted)	**Points Assigned**
away from FMA boundary	0
toward FMA boundary	30

Escape Potential (based on fuel continuity, natural barriers, weather)	**Points Assigned**
Low	0
Medium	20
High	30

Appendix FIRE-4. Wilderness Study Area Fire Management Plan - Fire Situationo Analysis (cont.).

Fuel Type	Points Assigned
Juniper	0
Surface	10
Brush	20
Grass/brush	30

The fire is classified by totalling points in the above categories. The classification point value breakdown is:

Total Point Value	Fire Classification
0-90	Non-suppression allowed to burn out naturally
90-130	Monitoring - monitoring with the frequency outlined in the alternative action plan selected for the particular fire.
130-above	Suppression - suppressed with the degree and type of suppression outlined in the alternative action plan selected for the fire.

Estimated fire size at 24 hours and at 48 hours, the present fire weather forecast and the predicted fire weather forecast are also taken into account.

Whe the fire has been classified, alternative action plans will be prepared and the alternative for the fire's management will be selected.

A new fire situation analysis will be prepared and on-site analysis of the fire will occur when a change in any category occurs, before the fire is declared out. Example: original analysis assigned 80 points to a fire and classified it as non-suppression. The original Burning Index (BI) assigned valued was 35, five days later a BI of 45 was present. The fire situation analysis assigns a point value of "90" to the fire, this constitutes re-categorization of the fire "monitoring" category.

Appendix FIRE-5. Fire Management Zones.

National Fire-Danger Rating System (NFDRS) fuel models are used to describe fuels and fire behavior for vegetation communities within the resource area. These models are comparable to the FMZs listed below.

FMZ 1.6: Most of the desert shrub communities within the resource area are included in this FMZ because of cheatgrass competition and fire behavior conditions. The objective for this zone is to limit wildfires to 100 acres or less. This zone is located in the northern portion of this resource area.

Model A: This fuel model represents western grasslands vegetated by annual grasses and forbs. Brush or trees may be present but are very sparse, occupying less than one-third of the area. The quantity and continuity of ground fuels vary greatly with rainfall from year to year.

FMZ 2.1: This FMZ is dominated by sagebrush and perennial grasses as the primary fuel types. Wet spring conditions and long hot summers with frequent dry lighting storms provide the potential for large acreages to burn. Terrain within this FMZ varies from steep and mountainous to gently rolling with large flats. The objective for this zone is to limit wildfires to 1,000 acres or less. This zone is south of the Owyhee River.

FMZ 2.2: The same conditions occur in 2.2 as in 2.1. The acreage objective is limited to 300 acres or less. This zone is the northern foothills area, southward along Highway 95, and a strip of land from the south boundary of the juniper woodlands to the Owyhee River.

Model T: The sagebrush-grass types of the Great Basin and the Intermountain West are characteristic of T fuels. The shrubs burn easily and are not dense enough to shade out grass and other herbaceous plants. The shrubs must occupy at least one-third of the site or the A or L fuel models are used.

Model L: This fuel model represents western grasslands vegetated by perennial grasses. The principal species are coarser, the loadings heavier and the quantity of fuel is more stable from year to year than Model A fuels.

FMZ 3.1: This FMZ is dominated by juniper woodlands and communities associated with higher elevation rangelands. The terrain within this zone varies from steep and rugged to gently rolling. The acreage allowed for FMZ 3.1 is 300 acres. The zone is located south of the Triangle-Jordan Valley road.

FMZ 3.2: The same conditions occur as for 3.1 except this zone is north of the Triangle-Jordan Valley road and includes the Silver City area. The FMAP has declared the Silver City area a maximum effort area. The acreage allowed for this zone is 100 acres.

Model C: Perennial grasses and forbs are the primary ground fuel but there is enough needle litter and branchwood present to contribute significantly to fuel loading. Some juniper stands may qualify for this model.

Model H: Short-needled conifers, with some brush, in a healthy stand with spare undergrowth and a thin layer of ground fuels are in this model. Low sagebrush may also be included in this model. Fires in H fuels are typically slow spreading and are dangerous only in scattered areas where the downed woody material is concentrated.

Appendix FIRE-6. Fire Occurrence by Fire Management Zones.

FMZ 1.6 accounts for about 25 percent of the wildfires, with 20 fires and 5,203 acres burned. About 435 acres, or 8.4 percent, were re-burns. These fires were in the desert shrub communities with cheatgrass on the burn sites.

FMZ 2.1, south of the Owyhee River, had seven wildfires, or about 8 percent of the total wildfires, with over 51,600 acres burned, all lighting-caused. This zone has an average of 7,373 acres per fire.

FMZ 2.2, north of the Owyhee River and south of the juniper woodlands, and north of the juniper woodlands in the foothills, has twice as many lighting fires as the human-caused fires. Of the 20 fires, or 25 percent, 13 were lighting-caused. Acres burned for all the wildfires in this zone were about 4,445 acres.

FMZ 3.1, the Juniper Mountain area between Triangle - Jordan Valley road and juniper woodland boundaries to the south, has had 21 wildfires, or 26 percent, with 13 being lighting-caused. Total acres burned was about 11,387 acres, with one fire in 1990 burning 10,000 acres. The other eight, or human-caused wildfires, averaged about 69 acres per fire.

FMZ 3.2, north of the Triangle-Jordan Valley road, has experienced 13 wildfires, or 16 percent of the total fires within the resource area. Both human-caused and lighting-caused were about even, with the lighting-caused burning more acreage. All wildfires burned a total of 811 acres. A large portion of the suppression cost was due to fire occurring around the Silver City to Murphy areas.

Appendix FLUM-1. Criteria for Determnation of Oil and Gas Potential.

Oil and gas resources, occur only in areas which have a specific set of favorable geologic conditions that favor their occurrence. The presence and nature of the following geologic characteristics must be evaluated to determine the potential for petroleum resources:

a. Thickness - a substantial thickness of sedimentary rocks;
b. Source Rocks - organically rich source rocks capable of generating oil and/or gas;
c. Reservoir Rocks - porous and permeable rocks that could provide a reservoir for oil and gas accumulations;
d. Traps - stratigraphic or structural traps;
e. Thermal Maturation - favorable for the generation of hydrocarbons from source rocks;
f. Direct Indications of Petroleum - oil and gas seeps, or shows from exploratory wells.
g. Geologic History - favorable timing of tectonic events to favor generation, maturation, migration, and trapping of oil and gas.

Geologic maps, subsurface well data, stratigraphic and structural data, and geophysical surveys are useful in determining these characteristics.

Appendix FLUM-2. Definition of Levels of Petroleum Resource Potential and Certainty of Assessment for Idaho.

Definitions of Petroleum Potential

High - Geologic environment highly favorable for occurrence of oil and gas accumulations. Area is near or on trend with existing production from structural and (or) stratigraphic traps. Included are areas designated as an oil and gas "play" as designated by the USGS national asssessment.

Moderate - Geologic environment favorable for the occurrence of oil and gas accumulations. Contains known reservoir rocks and hydrocarbon source beds. Includes some areas of sparse subsurface control or areas where expected field size will be small.

Low - Geologic environment is interpreted as unlikely for the occurrence of oil and gas accumulations. Includes areas of poor or unknown hydrocarbon source bed and (or) reservoir quality. Specific indications that one or more of the essential characteristics for a favorable geologic environment for oil and gas accumulation may not be present.

Zero - Geologic environment is interpreted to lack all of the essential characteristics favorable for the occurrence of oil and gas accumulations. Areas generally with exposed batholithic or PreCambrian rocks or with very thin sedimentary section with no potential for the occurrence of sealed structural or stratigraphic traps with hydrocarbons.

Levels of Certainty

Available information:

A. Is insufficient to infer level of potential; however, minimal potential cannot be ruled out.
B. Provides indirect evidence to infer the level of potential.
C. Provides direct evidence to indicate the level of potential.
D. Clearly defines the level of potential based on abundant direct and indirect evidence.

(Modified from: BLM Handbook H-1624-1, BLM Manual 3031, and Miller, 1983).

Level of Certainty →

Level of Resource Potential ↑

	H/B High Potential	H/C High Potential	H/D High Potential
	M/B Moderate Potential	M/C Moderate Potential	M/D Moderate Potential
L/A Low Potential	L/B Low Potential	L/C Low Potential	L/D Low Potential
			Z/D Zero Potential

Appendix FLUM-3. Oil and Gas Potential of the Owyhee Resource Area.

The purpose of this report is to describe the potential for occurrence of oil and gas resources in the Owyhee Resource Area. Based on the level of potential, reasonably forseeable oil and gas activity can be projected. Before any new leases can be offered or issued, potential environmental impacts of reasonable forseeable oil and gas activity must be considered. See Appendix FLUM-4 for a description of typical oil and gas exploration and development activities.

Geology

The geology of the Owyhee Resource Area has been mapped by Ekren and others (1981). Other publications, Ekren and others (1982 and 1984) are the basis for much of the following stratigraphic description. The surface geology of the resource area is dominated by Cenozoic volcanic rocks.

The oldest rocks in the area are Pre-Cretaceous metasedimentary roof rocks that overlie the Eocene(?)-Cretaceous granitic rocks of South Mountain (Ekren and others, 1981). Metamorphic rocks in this area include schist, quartzite, and marble. Hornblende-gabbro borders the granitic rocks at South Mountain. The granitic rocks of the Owyhee Mountains are considered to be part of the Idaho batholith by a consensus of investigators in the area. Intermediate composition volcanic rocks correlative with the Challis Volcanics are exposed in a small area in the eastern part of the Owyhee Mountains. Oligocene volcanics are locally exposed in the northern Owyhee Mountains with a thickness as much as 3,800 ft. Miocene olivine basalt and quartz latite lavas to 3,300 ft thick unconformably overlie granitic rocks and the Oligocene volcanics. Extensive rhyolite tuffs and lavas unconformably overlie the basalt and latite and are the predominant volcanics in the Resource area. To explain the contradictory pyroclastic and lava-flow characteristics exhibited in these rhyolites, Ekren and others (1981, 1982, and 1984) have proposed an extremely high-temperature (>1090°C) origin. During the period from 16 to 10 million years ago, these rocks were erupted from vents as ash-flow tuffs. Because of high temperatures, the tuffs coalesced as liquids before final emplacement and cooling. In upper Miocene following the period of rhyolitic volcanism, the area experienced a widespread basaltic volcanism (Banbury Basalt and similar units).

Intercalated with volcanic rocks are a series of lacustrine and fluvial sedimentary units that range from Miocene to Pleistocene. These units are of greatest extent along the margin of the Snake River Plain in the northeastern part of the resource area. The western Snake River Plain is a structural basin containing thick sequences of Tertiary volcanic and sedimentary rocks that fill the basin to a depth of at least 14,000 ft as demonstrated by a deep well drilled near Meridian (Halbouty James #1; Wood and Anderson, 1981). From geophysics, Mabey (1976) considers maximum fill in the western Snake River Plain to be 23,000 ft or more. In some areas, Tertiary sedimentary rocks, with some interbedded basalts are over 3,300 ft thick (Mabey, 1982).

Tertiary sedimentary units exposed in the resource area include the following units (Ekren and others, 1981; Malde and Powers, 1962; and McIntyre, 1972):

Epoch	**Stratigraphic Unit**	**Thickness (maximum)**
Pleistocene	Bruneau Formation	750 ft+
Pliocene to Miocene	Glenns Ferry Formation	980 ft+ Idaho

Miocene	Chalk Hills Formation	100 ft+
Miocene	Poison Creek Formation	400 ft+
Miocene	Interbedded sediments within the Banbury Basalt	200 ft
Miocene	Sedimentary Rocks beneath the Tuff of Swisher Mountain	70 ft+
Miocene	Sucker Creek Formation	1600 ft+
Miocene	Sedimentary basin fill in Reynolds Basin (Boston Ranch Fm. of McIntyre, 1972)	460 ft+

Idaho Group sediments, as described by Malde and Powers (1962), range in texture from sand to clay, but include volcanic ash, gravel, and diatomite. These rocks, interrupted by volcanic episodes, were deposited in fluvial, alluvial, and localized lake environments and filled the western Snake River Plain as the basin subsided. Most of these units include abundant tuffaceous material. The Sucker Creek Formation, exposed along the Oregon state line, contains tuff, tuffaceous sandstone, arkose, conglomerate, and carbonaceous mudstone.

Oil and Gas Potential

To date, there has been no oil and gas production in Idaho. While no exploratory drilling is ongoing at present, drilling activity and other exploration has occurred sporatically since the early 1900's in Idaho. Much of Idaho is covered by the Idaho batholith, Precambrian metamorphic rocks, and extensive volcanic complexes that offer little chance for the discovery of petroleum resources. Other areas, such as much of the Owyhee Resource Area is obscured by a mantle of volcanic rocks that conceal geologic characteristics of the subsurface, making predictions of petroleum potential difficult.

The highest potential for oil and gas resources in Idaho and the most recent focus of industry interest is in southeastern Idaho within the Idaho-Wyoming-Utah Overthrust Belt. A surge of geophysical exploration and exploratory drilling occurred in the late 1970's and early 1980's following successful petroleum discoveries in thick sequences of folded and thrust-faulted Paleozoic and Mesozoic marine sedimentary rocks of adjacent southwestern Wyoming and Utah.

In the Owyhee Resource Area, there is very little positive evidence to indicate the occurrence of petroleum. There are two major obstacles to assessing the oil and gas potential of the resource area: (1) pervasive cover of volcanic rocks; and (2) lack of the subsurface data.

A surface mantle of volcanic rocks does not necessarily negate the possibility of oil and gas source rocks, reservoirs, and traps at depth. In fact, in Nevada, significant oil production is derived from reservoirs in ash-flow tuffs at the Eagle Springs field. The closest oil and gas production is in Pine Valley, Nevada located 120 miles south of the Idaho state line. Irregardless of the Nevada production, the lack of rocks favorable for petroleum generation and accumulation does not paint a optimistic picture for the oil and gas potential of the Owyhee Resource Area.

Exploratory Wells in Vicinity of Resource Area

Exploratory wells drilled in the vicinity of the resource area are shown on Map FLUM-1. Of these six dry holes, only one was drilled in the resource area (Breckenridge, 1983). At the very least, the presence of thick sequences of volcanic rocks and granitic rocks are not encouraging for oil and gas exploration. The deepest test, Anschutz Federal No. 1 bottomed in granitic rocks at a depth of 11,125 ft. The upper part of this hole penetrated 2,320 ft of sedimentary rocks, chiefly volcanic siltstone and mudstone (McIntyre, 1979). Below the sedimentary rocks, from a depth of 2,320 ft to 10,950 ft, the stratigraphy consists principally of rhyolite, with thin intercalated basalt layers. At a depth of 10,950 ft granitic rocks were encountered and continued through total depth. The bottom-hole temperature for this hole was 149_C. Another deep well, Phillips Petroleum's Lawrence D. No. 1 (probably drilled to investigate geothermal resource potential), encountered similar stratigraphy and bottomed in silicic volcanics at 9,340 ft. Bottom-hole temperature in this well was 111_C. Slight gas shows were reported in Upper Deer Flat No. 11-9 well. No positive indications of oil and gas accumulations were encountered in other holes in the vicinity.

Exploratory Wells in Northern Nevada

Well data is also sparse in northern Nevada south of the Owyhee Resource Area, although somewhat more encouraging. 30 miles southeast of the resource area in Bull Run Basin, west of the Independence Mountains, Bull Run Oil and Gas No. 1 (sec. 21, T. 43 N., R. 52 E., M.D.M.) was drilled in 1922. In this 800-foot-deep well, a pocket of flammable gas was encountered that blew water out of the hole, but flow ceased after several hours (Garside and others, 1988). In 1957, Richfield Oil Corp. drilled Scott-Ogilvie No. 1 adjacent to this older well location. In the Richfield well, a gas shows and two oil shows were reported and Paleozoic rocks encountered at a depth of 3,390 ft (Garside and others, 1988).

In 1985, Exxon drilled Four Mile Butte Federal No. 1 (sec. 8, T.43 N., R. 49 E., M.D.M.) in the Owyhee Uplands about 25 miles south of the Owyhee Resource Area. This well spudded in Pliocene "Banbury" olivine basalt similar to the volcanic sequence in the southern part of the resource area. This well was reportedly drilled on the basis of a magnotelluric anomaly that suggested a limestone reservoir at depth (personal communication N. Brecheitsen, 1991). This hole penetrated a sequence composed almost entirely of rhyolitic tuffs to a total depth of 14,464 ft. A flurry of oil and gas leasing activity in northern Nevada and in the southern part of the resource area coincided with Exxon's interest in this area.

Geophysics

A low-magnitude magnetic anomaly is located south of the Owyhee Mountains in an area of complete cover of silicic volcanic rocks (Bhattacharyya and Mabey, 1980). This anomaly is similar to those observed over the central Idaho batholith. Bhattacharyya and Mabey (1980) suggest that the batholith exposed in the Owyhee Mountains may extend to the south beneath the volcanics. This geophysical interpretation is consistent with the hypothesis of Taubeneck (1971) that a connection between the Sierra Nevada and Idaho batholiths could exist in the southwest corner of Idaho.

Assessment of Oil and Gas Potential of the Resource Area

Oil and gas potential can be qualitatively judged on the basis of the presence or absence of basic criteria. See Appendix FLUM-1.

Thickness

Downwarping of the western Snake River Plain has provided a mechanism for the accumulation of significant thicknesses of Tertiary sedimentary rocks with some potential for petroleum. A substantial thickness of Tertiary sedimentary rocks are intercalated with volcanics in the Resource area, particularly adjacent to the Snake River Plain.

Source and Reservoir Rocks

No favorable Paleozoic or Mesozoic marine sedimentary rocks, which could provide possible hydrocarbon source and reservoir rocks, are exposed in the Resource area. The nearest exposures of Paleozoic sedimentary rocks are over 20 miles southeast of the resource area in northern Nevada. Near Mountain City, Nevada, the marine sedimentary sequence ranges in age from Silurian through Permian (Stewart and Carlson, 1978). Thick sequences of volcanic rocks in the southern part of the resource area could conceivably conceal areas of favorable Paleozoic and Mesozoic rocks, but this cannot be determined without adequate subsurface data.

The intercalated sedimentary rocks, some of which contain organic matter that could possibly be a source for hydrocarbons, offer some possibility for the discovery of petroleum resources in southwestern Idaho. Most exploratory wells have been drilled north of the resource area on the western Snake River Plain in the vicinity of Vale and Ontario, Oregon and Payette, Idaho (Newton and Corcoran, 1963). Many of the early wells in the vicinity of Payette were shallow and encountered impressive (although short-lived) shows of gas (mostly methane) associated with the “Payette formation” (Kirkham, 1935; Ross, 1941). According to Warner (1976), since 1909 over 200 water wells on the western Snake River Plain have reported shows of flammable gas. The “Payette Formation” is considered to be temporally correlative to the Sucker Creek Formation of Kittleman and others (1965).

The Succor Creek Formation is composed of tuff, volcanogenic sandstone, arkose, conglomerate, siltstone, and carbonaceous mudstone and is discontinuously exposed along the Oregon boundary north of Jordan Creek (Ekren and others, 1981). The carbonaceous mudstone may have some potential as petroleum-source rocks (Warner, 1981). Samples of the Sucker Creek Formation in and adjacent to the resource area have total organic carbon contents ranging from about 3 to 35 percent organic carbon (Warner, 1981). However, at the type section of the Sucker Creek Formation in Malheur County, Oregon (Kittleman and others, 1965), organic-rich carbonaceous intervals in the Sucker Creek Formation comprise only 83 feet of a total measured thickness of 585 feet (15 percent). In addition, Tertiary lacustrine and fluvial units are typically discontinous due to lateral facies changes. Since organic-rich portions of the exposed Sucker Creek Formation and other Tertiary sedimentary units in the resource area are relatively minor, the basis for considering these rocks as major potential source rocks is very speculative.

Although not exposed in the resource area, older Tertiary (Paleogene) lacustrine rocks that occur in northern Nevada could conceivably exist at depth below the volcanics. Late Cretaceous to Paleogene units of Nevada include lacustrine oil shale and bituminous carbonate (Fouch, 1977, 1979; Moore and others, 1983; Peterson, 1988). These organic-rich rocks are considered to be a source of hydrocarbons where buried at depths adequate to convert kerogen into oil or gas (Fouch and others, 1979).

Traps

Since the subsurface of the resource area is so poorly known, the presence of potential hydrocarbon traps beneath the thick volcanic cover is unknown. Given the geologic environment, block fault structures and stratigraphic traps are possible. Clay and tuff beds could provide seals for reservoirs (Peterson, 1988).

Thermal Maturation

Just as the presence of source rocks cannot be confirmed beneath the volcanic mantle, the thermal maturation level is also conjectural. Pre-Tertiary non-igneous rocks exposed near South Mountain are too metamorphosed to be considered as petroleum source rocks. Warner (1981) considers the level of thermal maturation for the Sucker Creek Formation to be suitable for petroleum generation, although, as previously mentioned, these rocks are of limited thickness and extent. Silurian through Mississippian rocks that are exposed over 20 miles southeast of the resource area in northern Nevada, are considered to be overmature for petroleum generation based on conodont alteration indices (Harris and others, 1980). One factor to consider relative to thermal maturation is the extent of volcanic activity and particularly the high temperatures of emplacement (>1090_C) of Miocene rhyolites (Ekren and others, 1982, 1984). Even if suitable source rocks exist beneath the volcanic cover, any hydrocarbons may have been driven off or be postmature for petroleum production.

Direct Indications

No direct indications of hydrocarbon presence such as oil and gas seeps, petroleum shows, or bitumen-bearing rocks are known in the resource area.

Geologic History

Persistent volcanic activity has dominated the resource area throughout the Cenozoic. Armstrong and others (1975) noted that silicic eruptive centers become younger in a northeast direction from McDermott Caldera in northern Nevada to Yellowstone. Morgan (1972) hypothesized that this progression represented the trail of a mantle plume (hot spot) beneath the southwestern-migrating North American plate. The formation of this volcanic province was likely accompanied by east-northeast directed crustal extension (Rodgers and others, 1990). In the Owyhee Plateau, extensive silicic volcanism occurred between 16 and 10 million years ago (Ekren and others, 1982). The presence of this level of intense volcanic activity could have easily driven off any accumulated hydrocarbons.

Classification of Petroleum Potential

Previous U.S. Geological Survey assessments of petroleum potential of Wilderness Study Areas (WSAs) in the Owyhee Resource area have resulted in potential levels of unknown, low potential, and no potential. Most authors agreed that data was at a low certainty level (A or B). (See References, USGS Bulletins 171-A through -G). In a more regional look at qualitative assessment of oil and gas potential, Sandburg (1983a-d) considers the cluster of WSAs in the southern Owyhee Resource Area, and in similar geologic setting to the southeast in Nevada to be of low potential. An unknown category is not used since it is not particularly useful for planning purposes.

For planning purposes, the resource area has been classified for petroleum potential and is shown on 1:100,000 scale maps. See Map FLUM-1. The classification scheme followed is shown in Appendix FLUM-2 in which levels of potential and certainty of data are considered. This classification system is similar to that used by the U.S. Geological Survey (Miller, 1983), and that used in BLM Manual 3031. It must be emphasized that due to the low certainty levels, these boundaries are at best an approximation. The resource area is classified as follows:

Low potential/Certainty level B (L/B) - Coincides with thick accumulations of Tertiary sedimentary rocks on the margin of the western Snake River Plain. Also exposures of the Sucker Creek Formation, which contains some potential source rocks, are included in this category. Some small accumulations of gas could exist within the Tertiary sediments in these areas.

Low potential/Certainty level A (L/A) - This area coincides with the southern part of the resource area. Based on the dominance of the Juniper Mountain and Little Jack's volcanic centers and lack of any identifiable petroleum source rocks exposed within the resource area, petroleum occurrences in this area are considered to be unlikely. Since it is conceivable that the volcanic mantle conceals source and reservoir rocks, minimal potential cannot be ruled out.

Zero Potential/Certainty level D (Z/D) - This area coincides with the granitic core of the Owyhee Mountains and the area projected to have granitic basement to the south. The location of Anschutz Federal No. 1, that bottomed in granite is included in this area. Eocene(?)- to Cretaceous age granodiorite and quartz diorite and adjacent post-mature metasedimentary rocks near South Mountain are included in this area. All evidence points to a lack of source rocks, traps, and other essential characteristics necessary for the occurrence of oil and gas.

Leasing Activity

Also of interest is the history of past oil and gas leasing and exploratory activity in the resource area. While there has been substantial past leasing activity in and adjacent to the resource area, particularly in the late 1970's to early 1980's, only minor exploratory drilling resulted. Leases concentrated in the southern part of the resource area adjacent to Nevada were in part related to Exxon's drilling of Four Mile Butte well in northern Nevada. There are currently no authorized or pending oil and gas leases or applications in the resource area.

Availability for Leasing

An important consideration for land-use planning is the availability of lands for leasing, exploration, and development. This has been the primary interest of industry relative to the Bureau planning process. It is important to emphasize that while the low (or even zero) potential level indicates a probability of minimal exploratory activity, lands should not be restricted on this basis alone. The Supplementary Program Guidance states "lack of potential or lack of industry interest is not to be considered a basis for closing lands or imposing constraints on development." The possibility always exists that future geologic research and exploration may reveal new insights and lead petroleum exploration into areas of unconventional petroleum geology. In areas mantled by volcanic rocks, the possibility of the presence of underlying petroleum source and reservoir rocks cannot be ruled out with complete certainty without adequate drill data.

Appendix FLUM-4. Description of Typical Oil and Gas Exploration and Development Activities.

Oil and gas exploration and development activities typically progress through five sequential stages: preliminary exploration, exploratory drilling, development, production, and abandonment. Some of these stages may overlap with others depending on the pace of exploration and development. Only the first stage may occur before leasing.

Preliminary Exploration

Generally, the first step in oil and gas exploration is examination of all available geologic literature and maps and remote sensing data pertaining to the area. Potential petroleum traps can sometimes be located with the aid of geologic maps, aerial photos, and satellite imagery. In areas where geologic maps are not available, the next step may be geologic mapping of the area. Geologic mapping usually involves one or more geologists examining rock outcrops on the ground. Rock samples may be taken for further study in the laboratory. Geological mapping and exploration can usually be accomplished with very little impact on the environment.

Quite frequently, the subsurface geologic structure cannot be determined from surface evidence alone. Geophysical prospecting techniques are used to detect and define subsurface structure not detectible using surface geologic methods. Three geophysical techniques commonly used in the search for hydrocarbons are gravity surveys, magnetic surveys and seismic reflection surveys.

Gravity and magnetic surveys use small portable instruments which can be easily transported by light vehicles such as pickup trucks, jeeps or small aircraft. The use of off-road vehicles is common, especially for gravity surveys. Magnetic surveys are usually done from aircraft flying at low to intermediate altitudes. Normally the only impact on the environment is from the passage of the off-road vehicles over the area. Sometimes small holes approximately two inches square and one inch deep are hand dug for instrument placement at the survey points.

Seismic reflection surveys are the most frequently used geophysical method for oil and gas exploration because they produce the most detailed subsurface information. The seismic reflection method requires an energy source and a linear array of detectors called geophones.

The type of energy source used for a seismic reflection survey depends on a number of variables, two of which are the availability of roads and the cultural setting. In populated areas where roads are available, a vibrator source using a truck or buggy mounted hydraulic vibrator may be used as the energy source. To be able to use the vibrator source method, the seismic line must go along a straight road, or if cross country, over driveable terrain. In areas remote from population centers, high explosives may be used to provide the energy source. When explosives are used, they are usually placed at the bottom of holes drilled to a predetermined depth by a truck mounted drill rig. Shot hole depths normally range from 25 to 200 feet. The hole diameter is typically two to six inches. The size of the explosive charge can range from five to fifty pounds. Drill cuttings normally are scattered by hand near the shot hole or put back in the hole after the charge has been placed. Proper preplugging of the shot hole with tamped drill cuttings or bentonite chips will prevent the hole from blowing out when the charge is detonated. A properly preplugged shot hole will create the best seismic source and will not cause surface disturbance. In roadless areas or in situations where it is not feasible to drill shot holes, surface explosives may be used. The surface explosive method may be supported by four wheel drive vehicles, pack animals, helicopters or a combination of the above.

The geophones are normally deployed in as straight a line as is practical. When existing roads coincide with the desired array direction they are used to deploy the geophones. In areas of rugged terrain or no roads, the geophones may be deployed on foot or by helicopter. In some cases it may be necessary to deploy the array in a grid pattern. The spacing between the grid lines may be anywhere from a fraction of a mile to many miles depending on the depth and complexity of the structures being studied.

An area may be explored several times by the same or different companies over a period of time for a variety of reasons. Further, exploration of an area does not necessarily mean that the subsurface structures or source rocks necessary for the occurrence of hydrocarbons will be found. The reality of oil and gas exploration is that often preliminary investigations show that an area does not have adequate subsurface structures, therefore, the next stage, exploratory drilling, does not take place.

Exploratory Drilling

When preliminary exploration indicates that a favorable structure(s) exists in the area, exploratory drilling may be justified. On Federal mineral estate, an oil and gas lease must first be obtained before drilling may occur.

Exploratory or wildcat oil and gas wells may range in depth from a few thousand to many thousands of feet. The deeper wells may require several months or more to complete; shallower wells up to a few thousand feet deep may be completed in as little as a few weeks. As a general rule,the deeper the test, the larger the drilling rig and facilities required.

Oil well drill rigs are very large and are usually moved in pieces. Moving a dismantled rig involves use of heavy trucking equipment and crews to erect the rig. Gross weight of vehicles may run in excess of 80,000 pounds. In order to move a drill rig and its associated equipment, roads may need to be built. These roads generally will be constructed with bulldozers, graders and other types of heavy equipment. They will have a running surface 18 to 20 feet wide and will be ditched on one or both sides. The total width of surface disturbance caused by road construction will depend on terrain. An average width of about 40 feet should be used in estimating the amount of disturbance. Access roads should follow existing roads or trails when possible; however, it may be necessary to route the road over unroaded land because either there are no existing roads or the existing roads and trails are too steep.

Prior to assembling the drill rig, a pad from one to four acres in size is cleared and leveled. On hillside locations, the amount of dirtwork depends on the steepness. A typical platform might require a cut of 20 feet deep into the hillside and a fill 10 feet high on the downslope side. Topsoil is usually removed and stockpiled for reclamation.
In addition to the drill rig, the pad will contain mud pumps, a reserve pit, electric generators, drill pipe, a tool house and other equipment storage facilities. Other facilities such as storage tanks for water and fuel are located on the pad or are positioned nearby on a separate cleared area. If the well site is not large enough for the equipment required to rig-up, a separate staging area may be constructed. Staging areas are usually no larger than 200 feet by 200 feet and may simply be a wide flat spot along the access road on which vehicles and equipment are parked.

Reserve pits for the containment of drilling fluids and cuttings are constructed adjacent to or on the drill pad. The size of the reserve pit will depend on the depth and size of the drill hole, types of subsurface geologic conditions encountered, and the kinds of drilling fluids used. Pits are usually constructed adjacent to the fill and below the drill platform elevation. However, in steep terrain the pit may be constructed against the cut portion of the well pad in order to reduce disturbance and facilitate retention drilling fluids. If there is a potential for either groundwater or surface water contamination, the reserve pit is lined with impermeable material.

Well drilling requires a water source. Five thousand to 15,000 gallons of water a day may be needed for mixing drilling mud, cleaning equipment, etc. If a surface water source is nearby, a pipeline may be laid from the source to the drill site. If there is no nearby source, either a water well will be dug or the water will have to be trucked from the nearest available source.

Development

If an exploratory well becomes a discovery well (a well that finds a new field containing commercial quantities of oil and/or gas), development wells will be drilled to confirm the discovery, establish the extent of the field, and efficiently drain the reservoir. The procedures for drilling development wells are about the same as for exploratory wells, except there is usually less subsurface sampling, testing, and evaluation.

During the development stage, the road system of the area is greatly expanded. Once it is known which wells will produce in paying quantities, a permanent road system can be designed and built. Because it often takes several years to develop a field and determine field boundaries, the permanent road system is usually built in segments. Often, roads built as temporary routes to access exploratory well sites end up as long-term main access and haul roads. Access roads built for development and production wells are better planned, designed and constructed than those built for exploratory wells. Access roads are normally limited to one main route to serve the lease areas, with a maintained side road to each well. Upgrading of temporary roads may include ditching, draining, installing culverts, graveling, crowning, or capping the roadbed. The amount of surface area needed for roads would be similar to that for temporary roads mentioned earlier and would also be dependent on topography and the loads to be transported over it. Generally, main access roads are 20 to 24 feet wide and side roads are 14 to 18 feet wide. These dimensions are for the driving surface of the road and not the maximum surface disturbance associated with ditches, cuts or fills. The difference in amount of disturbance is a matter of topography. Surface disturbance in excess of 130 feet is not unusual in steep terrain where slopes exceed 30 percent. In addition to roads, other surface use requirements for development of a field may include flowlines, powerlines, storage tank batteries, facilities to separate oil, gas and water, and injection wells for salt water disposal. Some of these facilities are discussed in the section on production.

Prior to development, a well spacing pattern must be established by the state, with approval by the BLM. Well spacing for oil production from Federal leases is usually a minimum of 40 acres. Most gas well spacing for production Federal leases uses units of 160, 320, and 640 acres per well. Spacing for both oil and gas wells is based on the characteristics of the producing formation. If a field is producing from more than one formation, the surface location of the well may be much closer than one per 40 acres.

In an oil field developed on a spacing pattern of 40 acres per well, the wells are 1,320 feet apart in both north-south and east-west directions. If a section is developed with 16 wells, at least four miles of access roads are built. In mountainous terrain, the length of access roads may be increased since steep slopes, deep canyons, and unstable soil areas must often be circumvented in order to construct stable access to wells.

The amount of surface disturbance required for development of a gas field is similar to that for an oil field even though the well spacing is usually 160 acres. With 160 acre spacing, only four wells are required per section; however, the associated pipeline system often creates surface use requirements similar to those of an oil field.

The amount of surface use for development of an oil and gas field may be reduced by unitization of the leaseholds. In many areas with federal lands, an exploratory unit is formed before a wildcat is drilled. The boundary of the unit is based on geologic data. The developers unitize the field by entering into an agreement to develop and generate it as a unit, without regard to separate ownerships. Costs and benefits are allocated according to agreed terms. Unitization reduces the surface-use requirements because all wells are operated as though on a single lease. Duplication of field processing facilities is minimized because development operations are planned and conducted by a single operator, often resulting in fewer wells.

The rate of development well drilling depends on whether the field is operated on an individual lease basis or under a unit agreement, the rate at which the field can be produced, the availability of drilling equipment, protective drilling requirements, and the degree to which limits of the field are known. If the field is to be produced on an individual lease basis, development usually proceeds more rapidly than under a unit agreement since each lease must have its own well or wells to prevent drainage of petroleum by an adjoining lease. Drilling in an undeveloped part of a lease to prevent drainage of petroleum to an offset well in an adjoining lease is often required in fields of intermingled Federal and private or state owned minerals. The terms of Federal leases require such drilling if the offset well is on non-Federal minerals or on Federal minerals leased at a lower royalty rate.

If the field is developed under a unit agreement, all owners within the participating area share in a well's production regardless of whose lease the well is on. Spacing requirements are not applicable to unitized fields. The field is developed on what the operator determines to be the optimal spacing pattern to maximize recovery.

If the discovery well has a high rate of production and substantial reserves, development drilling usually proceeds at a fairly rapid pace. If there is some question whether reserves are sufficient to warrant additional wells, development drilling may occur at a much slower pace. An evaluation period to observe production performance may follow the drilling of successive wells.

Many fields go through several development phases. A field may be considered fully developed and produce for several years, then a well may be drilled to a deeper pay zone. Discovery of a new pay zone in an existing field is a "pool" discovery, as distinguished from a new field discovery. A pool discovery may lead to the drilling of additional wells, often from the same drill pad as existing wells. Existing wells may also be deepened to produce from the new pool.

Production

Production from an oil field begins just after the discovery well is completed and is usually concurrent with development operations. Temporary facilities may be used at first, but as development proceeds and reservoir limits are determined, permanent facilities are installed. The extent of such facilities is dictated by the number of producing wells, the volume of production, and the volume of gas and water produced with the oil.

Appendix FLUM-4. Description of Typical Oil and Gas Exploration and Development Activities (cont.).

Typically, oil is produced in association with water and natural gas. Reservoirs that produce oil, gas and/or water require the siting of facilities for the production, separation, and storage or transportation of the products at the well site. If the well produces naturally, that is the oil and gas flow to the surface under natural pressure, only a series of pipes and valves at the well head are required to regulate the flow of product to the surface. If natural pressure is insufficient, a pump is installed to lift the product to the surface. Once the product comes to the surface, it travels through pipes to separation equipment where water and gases such as carbon dioxide and hydrogen sulfide are removed and oil and natural gas separated. The oil is piped to storage facilities. The separation and/or storage facilities may either be located away from the well pad for common use by more than one well or they may be located on the same pad as the well from which production occurred.

Produced water is disposed of either by discharge into surface drainages, evaporation in pits, or reinjection. Although most produced waters are brackish to highly saline, some are fresh enough for beneficial use. If water is to be discharged, it must meet applicable quality standards. Evaporation pits are the most common method for disposing of produced water. These pits are usually located adjacent to the well site and may be lined with an impermeable material to prevent soil and groundwater contamination. If the water is to be reinjected, either a dry or abandoned oil well may be used or in some cases a new well drilled for specifically for reinjection.

If the well produces enough natural gas to be economic and a natural gas transmission pipeline is located within suitable distance, a network of gathering pipelines collects the gas from each well. The gathering system usually consists of pipe two to four inches in diameter which is laid on the ground or buried several feet below the surface. Surface pipelines will normally disturb an additional area 10 to 12 feet wide when constructed adjacent to existing roads. BLM usually requires that pipelines either be laid near the access road or buried under it to prevent additional surface disturbance. The collected gas is piped to the main transmission line and on to market. If there is not enough gas to be economic and/or no gas transmission pipeline is located nearby, the gas will be reinjected into the reservoir.

Produced oil is stored in tanks either at the well or in common tanks central to two or more wells. There are normally at least two tanks; so that one tank can be filling as the contents of the other are measured, sold and transported. The number and size of tanks depend on the rate of production and the extent of automation in gauging the volume and sampling the quality of the tank's contents. The oil is transported from these tanks to a distribution point by truck. In the case of highly productive fields, oil carrying pipelines may be laid from the field to a distribution point or refinery. In these cases, there is a network of pipelines to each well similar to that for the gas gathering system. The oil gathering lines are usually four to six inches in diameter.

Sometimes, hydrogen sulfide, a highly toxic gas, may occur with the hydrocarbons. In these cases, special stainless steel pipe is used to contain the production until the hydrogen sulfide can be separated from the hydrocarbons. The hydrogen sulfide is either disposed of by incineration or neutralized by sulfur extraction.

In some fields, natural gas occurs without any associated oil. Usually these "dry gas" fields produce some water and may also contain a small amount of liquid condensate or "drip". Dry gas wells typically have only a "christmas tree" or valve assembly showing above ground. Production facilities may include a separator, a pit or tank for the collection of separated produced water and a small tank for the storage of the liquid condensate. The condensate tanks are typically 10 to 12 feet in diameter and 20 feet or more high. Additional facilities might include a compressor station if the gas does not have sufficient natural pressure to move it to a distribution point. As with oil and gas production, there is a gathering pipeline for distribution.

Oil is under natural pressure in nearly all reservoirs. Oil produced entirely or partially using natural reservoir pressure is referred to as primary production. In the average reservoir, primary production accounts for about 25 percent of the oil. In some fields, various methods are used to maintain or increase the reservoir pressure. These methods, which generally involve pumping water or gas into the reservoir, are referred to as secondary recovery. Recently, the trend has been to institute secondary recovery processes very early in the development of a field. Surface disturbance from a water flooding recovery system is similar to drilling and development of an oil and gas production well, i.e., a drill pad and access road are constructed and water pipelines built. Surface use is increased substantially since as many as four injection wells may be used for each oil well in the field. There are many different patterns as well as many other methods of secondary recovery.

Abandonment

In exploratory drilling, if oil or gas is not discovered in paying quantities, the well is considered dry. In this case, once drilling and testing of the well has been completed, the operator is required to plug the hole in accordance with prescribed Federal and State procedures.

After the well is plugged and all equipment is removed, the well site is reclaimed according to the requirements of the surface management agency. The reserve pit must be evaporated or pumped dry and filled with stockpiled soil material. Heavy equipment such as bulldozers and graders may be used to recontour disturbed areas associated with the drill pad plus the access road. After the site is recontoured to its natural shape and stockpiled topsoil is spread, it is seeded with a mixture grasses that will grow in the climate and soil conditions of the area. A fence may be erected to protect the site until revegetation is complete, particularly in livestock grazing areas.

In producing oil and gas fields, the life span of an individual field depends on the unique characteristics of the reservoir as well as how the field is produced. In addition to the natural reservoir characteristics and the techniques used to produce the oil and/or gas, political, economic and environmental constraints all affect a field's life span from discovery to abandonment. Some fields may produce for only a few years while others have been producing for nearly 100 years.

Abandonment of individual wells may start early in a field's life and reach a maximum when the field is depleted. In some cases, wells that formerly produced are plugged as soon as they are depleted. In other cases, depleted wells are not plugged immediately but are allowed to stand idle for possible later use in a secondary recovery program. Truck-mounted equipment is used to plug former producing wells. If the casing is salvaged, a cement plug is put across the casing stub. Cement foundations for pumps and other equipment are removed or buried below ground level. Surface flow and injection lines are removed, but buried pipelines are usually left in place and plugged at intervals as a safety measure.

Appendix FLUM-5. Definition of Levels of Geothermal Potential and Levels of Certainty.

Geothermal potential is defined as the likelihood of the presence of stored heat, both identified and undiscovered, that is recoverable using current or near-current technology, regardless of cost; it is not a measure of the amount of resources or their profitability. The levels of geothermal potential and the classification standards for each are:

1. High. Inclusion in a KGRA; or existence of an active hydrothermal convection system demonstrated by thermal spring activity or by other thermal features such as geysers, mud volcanoes, and fumeroles; or high subsurface temperatures measured in wells and/or estimated by chemical geothermometry.

2. Medium. Existence of a hot igneous system demonstrated by geologic evidence of Late Tertiary or Quaternary volcanism and higher than normal geothermal gradient as documented in existing literature.

3. Low. Existence of a conduction dominated area demonstrated by the absence of hydrothermal convection systems or hot igneous systems. Includes areas of radiogenic heat production, geopressured environments, and regions with above normal geothermal gradients.

4. None. Absence of physical evidence indicating the existence of hydrothermal convection systems, hot igneous systems, and higher than normal geothermal gradient.

The level of certainty of an assessment of mineral potential incorporates a consideration of the adequacy of the geologic, geochemical, geophysical, and resource data and literature available at the time of the assessment. The levels of certainty and standards for each are:

A. The available data are insufficient and/or cannot be considered as direct or indirect evidence to support or refute the possible existence of mineral resources within the area.

B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.

C. The available data provide direct evidence but are quantitatively minimal to support or refute the possible existence of mineral resources.

D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

Appendix RECT-1. Management Guidelines for Potential Wild and Scenic Rivers.

The following are management guidelines for the interim protection of potential wild, scenic, and recreational river values for river segments that are awaiting a determination by Congress.

Wild Classification:

Management of Wild River areas should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting. Allowable management practices might include construction of minor structures for such purposes as improvement of fish and game habitat; grazing; protection from fire, insects or disease; rehabilitation or stabilization of damage resources, provided the area will remain natural appearing and the practices of structures will harmonize with the environment. Such things as trail bridges, an occasional fence, natural-appearing water diversions, ditches, flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct adverse effect on the natural character of the area. The following program management standards apply:

a. Forest Practices: Cutting of trees will not be permitted except when needed in association with a primitive recreation experience (such as clearing for trails and protection of users) or to protect the environment (such as control of fire). Timber outside the boundary, but within the visual corridors, should, where feasible, be managed and harvested in a manner to provide special emphasis to visual quality.

b. Water Quality: Water quality will be maintained or improved to meet federal criteria or federally approved State standards.

c. Hydroelectric Power and Water Resource Development: No development of hydroelectric power facilities would be permitted. No flood control dams, levees, or other works are allowed in the channel or river corridor. The natural appearance and essentially primitive character of the river area must be maintained. All water supply dams and major diversions are prohibited.

d. Mining: New mining claims and mineral leases are prohibited within one-quarter mile of the river. Valid existing claims would not be abrogated and, subject to existing regulations (e.g. 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the rivers included in the National System, existing mining activity would be allowed to continue. All mineral activity must be conducted in a manner that minimizes surface disturbance, sedimentation, pollution, and visual impairment. Reasonable access will be permitted.

e. Road Construction: No new roads or other provisions for overland motorized travel would be permitted within a narrow incised river valley, or of the river valley is broad, within one-quarter mile of the river bank. A few inconspicuous roads leading to the boundary of the river area may be permitted.

f. Agriculture and Livestock Grazing: Agricultural use is restricted to a limited amount of domestic livestock grazing and hay production to the extent currently being practiced. Row crops are prohibited.

g. Recreation Facilities: Major public-use areas, such as campgrounds, interpretive centers, or administrative headquarters are located outside Wild River areas. Simple comfort and convenience facilities, such as fireplaces or shelters may be provided as necessary within the river area. These should harmonize with the surroundings. Unobtrusive hiking and horseback riding trail bridges could be allowed on tributaries, but would not normally cross the designated river. In the case of the upper North Fork Owyhee River and Current Creek, a few trail bridges across the river channel would be allowed as long as they are not within view of each other and they are of the minimum size necessary to provide for public safety.

h. Public Use and Access: Recreation use, including, but not limited to hiking, fishing, hunting and boating is encouraged in Wild River areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance Wild River values.

i. Rights-of-Way: New transmission lines, natural gas lines, water lines, etc., are discouraged unless prohibited by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, Wild River values must be fully evaluated in the selection of the site.

j. Motorized Travel: Motorized travel on land could be permitted, but is generally not compatible with this classification. The existing primary road access to the rivers would be maintained. Motorized travel on the water would be prohibited.

Scenic Classification:

Management of Scenic River areas should maintain and provide outdoor recreation opportunities in a near natural setting. The basic distinctions between a Wild and a Scenic River area are the degree of development, type of land use and road accessibility. In general, a wide range of agricultural, water management, silvicultural and other practices could be compatible with Scenic River values, providing such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment. The same considerations enumerated for Wild River areas should be considered, except that motorized vehicle use may, in some cases, be appropriate and that development of large scale public-use facilities within the river area, such as moderate size campgrounds, public information centers, and administrative headquarters, would be compatible if such structures were screened from the river. The following program management standards apply:

a. Forest Practices: A wide range of silvicultural practices could be allowed provided that such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment. The river area should be maintained in its near natural environment. Timber outside the boundary but within the visual scene area should be managed and harvested in a manner which provides special emphasis on visual quality.

b. Water Quality: Water quality will be maintained or improved to meet federal criteria or federally approved State standards.

c. Hydroelectric Power and Water Resource Development: No development of hydroelectric power facilities would be allowed. Flood control dams and levees would be prohibited. All water supply dams and major diversions are prohibited. Maintenance of existing facilities and construction of some new structure would be permitted provided that the area remains natural in appearance and the practices or the structures harmonize with the surrounding environment.

d. Mining: Subject to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the values of rivers included in the National System, new mining claims and mineral leases could be allowed. All mineral activity must be conducted in a manner that minimizes surface disturbance, sedimentation, pollution and visual impairment. Reasonable access will be permitted.

e. Road Construction: Existing roads may occasionally bridge the river area and short stretches of conspicuous or long stretches of inconspicuous and well-screened roads or screened railroads could be allowed. Maintenance of existing roads and any new roads will be based on the type of use for which roads are constructed and the type of use that will occur in the river area.

f. Agriculture and Livestock Grazing: In comparison to Wild River areas, a wider range of agricultural and livestock grazing uses is permitted to the extent currently practiced within Scenic River areas. Row crops are not considered as an intrusion of the "largely primitive" nature of Scenic corridors as long as there is not a substantial adverse effect on the natural-like appearance of the river area.

g. Recreation Facilities: Larger scale public use facilities, such as moderate size campgrounds, public information centers, and administrative headquarters are allowed if such structures are screened from the river. Foot trails can parallel the river in close proximity, and associated bridges may cross the river channel.

h. Public Use Access: Recreation use, including but not limited to hiking, fishing, hunting and boating, is encouraged in Scenic River areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance Scenic River values.

i. Rights-of-Way: New transmission lines, natural gas lines, etc., are discouraged unless prohibited by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, scenic river values must be fully evaluated in the selection of the site.

j. Motorized Travel: Motorized travel on land may be permitted, prohibited or restricted to protect the river values. Motorized travel on the water would be prohibited.

Recreational Classification:

Management of Recreational River areas should be designed to protect and enhance existing recreational values. The primary objective will be to provide opportunities for engaging in recreation activities dependent on or enhanced by the largely free-flowing nature of the river. Recreation facilities may be established in close proximity to the river, although Recreational River classification does not require extensive recreation developments. Recreation facilities may still be kept to a minimum, with visitor services provided outside the river area. Future construction of impoundments, diversions, straightening, riprapping, and other modification of the water way or adjacent lands would not be permitted except in instances where such developments would not have a direct and adverse effect on the river and its immediate environment. The following program management standards apply:

a. Forest Practices: Timber harvesting would be allowed under standard restrictions to protect the immediate river environment, water quality, scenic, fish and wildlife, and other values.

b. Water Quality: Water quality will be maintained or improved to meet federal criteria or federally approved State standards.

c. Hydroelectric Power and Water Resource Development. No development of hydroelectric power facilities would be allowed. Existing low dams, diversion works, riprap and other minor structures may be maintained provided the waterway remains generally natural in appearance. New structures may be allowed provided that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment.

d. Mining: Subject to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect values of rivers included in the National System, new mining claims and mineral leases are allowed an existing operations are allowed to continue. All mineral activity must be conducted in a manner that minimizes surface disturbance, sedimentation, pollution, and visual impairment. Reasonable access will be permitted.

e. Road Construction: Existing parallel roads or railroads can be maintained on one or both river banks. There can be several bridge crossings and numerous river access points.

Appendix RECT-1. Management Guidelines for Potential Wild and Scenic Rivers (cont.).

f. Agricultural and Livestock Grazing: In comparison to Scenic River areas, lands within Recreational River areas may be managed for a full range of agriculture and livestock grazing uses, consistent with current practices.

g. Recreation Facilities: Interpretive centers, administrative headquarters, campgrounds, picnic areas and foot trails may be established in close proximity to the river. Foot trail bridges may cross the river channel. However, recreational classification does not require extensive recreation development.

h. Public Use and Access: Recreation use, including but not limited to hiking, fishing, hunting and boating, is encouraged in Recreational River areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance Recreation River values.

i. Rights-of-Way: New transmission lines, natural gas lines, water lines, etc., are discouraged unless prohibited by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, Recreation River values must be fully evaluated in the selection of the site.

i. Motorized Travel: Motorized travel on land or water will generally be permitted, on existing roads. Controls will usually be similar to surrounding lands and waters.

Appendix RECT-2. Final Eligibility and Classification Determinations for Potential Wild, Scenic and Recreational River Designations.

Between 1990 and early 1991, the Owyhee Resource Area (ORA) inventoried 54 river segments totaling 1,218.5 miles for wild, scenic, and recreational river values as defined by the Wild and Scenic River Act (P.L. 90-542). On April 25, 1991, the ORA released a list of rivers totalling 325.75 miles that were determined to be preliminarily eligible for further evaluation; 892.75 miles were found to be non-eligible for further evaluation. During this final evaluation, an additional river segment (S3g) of 3.0 miles was evaluated for eligibility.

The inventory looked at each river segment to determine its qualification as a free-flowing river possessing one or more "outstandingly remarkable" values under a classification providing either wild, scenic, or recreational type setting. These terms are defined as follows:

Section 15

(a) "River" means a flowing body of water or estuary or a section, portion or tributary thereof, including rivers, streams, creeks, runs, kills, rills and small lakes.

(b) "Free-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundments, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion...

Section 5(d)

(1) Wild river areas - those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundments or diversion in the past.

Section 1(b)

Outstanding Remarkable Values: Scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar value (such as watershed and vegetation). The judgment as to whether resource values are outstandingly remarkable can be made from a regional, State or national context.

On May 2, 1991, the BLM released its draft nationwide Manual 8351: Wild and Scenic Rivers - Policy and Program Direction for Identification, Evaluation, and Management. This policy directive provides national standards on how "outstandingly remarkable" values are to be interpreted and applied during the rivers inventory. These standards are as follows:

1. Scenic. The landscape elements of landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification are unique and harmonious. The rating area must be scenic quality "A" as defined in the BLM Visual Resource Inventory Handbook, H-8410-1, illustrations 1 and 2. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and length of time negative intrusions are viewed may be considered.

2. Recreational. Recreational opportunities are or have the potential to be unique enough to attract visitors from outside the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but not be limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting, and boating. Interpretive opportunities may be exceptional and attract or have the potential to attract visitors from outside the geographic area. The river may provide or have the potential to provide settings for national or regional commercial usage or competitive events.

3. Geologic. The river or the area within the river corridor contains an example(s) of a geologic feature, process, or phenomenon that is rare, unusual, one-of-a-kind, or unique to the geographic region. The feature(s) may be in an unusually active stage of development, represent a textbook example and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, and other geologic structures).

4. Fisheries. Fish values may be judged on the relative merits of either fish populations or habitat, or a combination of these river-related conditions.

   a. Populations. The river is nationally or regionally one of the top producers of resident and/or anadromous fish species. Of particular significance is the presence of wild or unique stocks, or populations of federally listed or candidate threatened and endangered species.

   b. Habitat. The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for federally listed or candidate threatened and endangered species.

5. Wildlife. Wildlife values may be judged on the relative merits of either wildlife populations or habitat, or a combination of these conditions.

a. Populations. The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species.

b. Habitat. The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federally listed or candidate threatened and endangered species. Contiguous habitat conditions are such that the biological needs of the species are met.

6. Prehistoric Cultural. The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by native Americans. Sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human-interest values(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes.

7. Historic Cultural. The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual or one-of-a-kind in the region. A historic site(s) and or feature(s) in most cases is 50 years old or older. Of particular significance are sites or features listed in, or eligible for inclusion in, the National Register of Historic Places.

8. Other Similar Values. While no specific evaluation guidelines have been developed for the "other similar values" category, additional river-related values deemed relevant to the eligibility of the river segment should be considered in a manner consistent with the foregoing guidance—including, but not limited to, hydrologic, ecologic/biologic diversity, paleontologic, botanic, and scientific study opportunities.

Each of the preliminarily eligible river segments were re-evaluated in accordance with the draft nationwide standards. Based upon this review, there are 10 river segment groupings totalling 223.0 miles that have been found to be eligible for potential congressional designation as national rivers under one of the three classifications. As such, the segments are being studied in the Owyhee RMP to determine if they are suitable for congressional designation.

The final eligibility and classification documentation for the eligible river segments are found in Appendix RECT-3. A tabular listing of all eligible river segments is shown below. Table RECT-4 lists all inventoried river segments and their eligibility and classification determinations. Documentation for non-eligible river segments is found in part in Appendix RECT-4 and is available at the Boise District Office. See Map WSR-1 for locations.

Appendix RECT-2. Final Eligibility and Classification Determinations for Potential Wild, Scenic and Recreational River Designations (cont.).

Eligible Wild, Scenic and Recreational River Segments

Seg. Grp.	Seg.#	Segment Name	Seg. Miles	Seg. Class	Outstandingly Remarkable Values						
					Scen	Rec	Geo	Fish	Wdlf	Cult	Other
1	S1a&c	S.F. Owyhee R.	26.5	Wild	x	x	x		x		
		S.F. Owyhee R.	1.5	Rec	x	x	x		x		
		Total	28.0								
2	S2a	Lower E.F. Little	8.75	Wild					x		
		Owyhee River	.75	Rec					x		
		Total	9.5								
3	S3a	E.F. Owyhee R.	66.0	Wild	x	x	x		x		x
	S3b	Bald Mtn. Ck.	3.0	Wild	x	x	x		x		
	S3e	Piute Ck.	3.0	Wild	x	x			x		
	S3f	Juniper Ck.	3.0	Wild	x	x			x		
	S3g	Dukes Ck.	3.0	Wild	x	x	x		x		
		Total	78.0								
4	S4a-c	Deep Ck.	32.0	Wild	x	x	x		x		
	S7a	Nickel Ck.	8.0	Wild	x	x	x		x		
		Total	40.0								
5	S5a	Red Canyon Ck.	4.0	Wild	x	x	x		x		
	S6a	Petes Ck.	3.0	Wild	x	x	x		x		
		Total	7.0								
6	S8a	Current Ck.	7.5	Wild	x	x	x		x		
			1.5	Scenic	x	x					
		Subtotal	9.0								
		Corral Ck.	3.0	Wild	x	x	x		x		
		Total	12.0								
7	C5a	Lower N.F. Owyhee River	4.0	Wild	x	x	x		x		
8	C5b	Upper N.F.									
		Owyhee River	16.0	Wild	x	x	x		x		x
		Juniper Ck.	1.5	Wild	x	x	x		x		
		Cabin Ck.	3.5	Wild	x	x	x		x		
		Corral Ck.	1.0	Wild	x	x	x		x		
		Noon Ck.	3.0	Wild	x	x	x		x		
		Pleasant Vly. Ck.	3.5	Wild	x	x	x		x		
		Total	28.5	Wild	x	x	x		x		
9	C9	Boulder-Rock Ck.	11.5	Wild	x				x		
10	N8	Jump Ck.	4.0	Wild	x	x			x		x
			.5	Rec	x	x					
		Total	4.5								
Total			223.0	-	x	x	x	-	x	-	x

WILD, SCENIC, AND RECREATIONAL RIVERS ELIGIBILITY DETERMINATIONS

OWYHEE RESOURCE AREA STAFF RECOMMENDATION

The Owyhee Resource Area and Boise District staff, after inventory and review of all river and stream segments (totalling 1,221.5 miles) in the resource area, recommend that the 223.0 miles of rivers and streams identified in this Owyhee RMP Appendix are eligible for further study as wild, scenic, or recreational rivers.

Recommended By:

/s/ John R. Benedict	2/11/92
Owyhee Recreation Planner	Date
/s/ J.C. Harksen	2/11/92
Owyhee Geologist	Date
/s/ J.M. Young	1/7/92
Owyhee Archaeologist	Date
/s/Mike J. Mathis	2/11/92
Owyhee Wildlife Biologist	Date
/s/ Pat Kane	2/11/92
Owyhee Range Conservationist	Date
/s/ Pat Olmstead	2/11/92
Boise District Fisheries Biologist	Date

Appendix RECT-3. Eligibility and Classification for Eligible River Segments.

South Fork Owyhee River and Small Tributaries
Segments S1a, b, and c

I. Physical Description

1. Location

   a. South Fork Owyhee River: Nevada stateline downstream to confluence with East Fork Owyhee River.

   b. Tributary canyons (3), unnamed: South Fork Owyhee River upstream to head of each canyon. For the purpose of this document they will be called:

      (1) Coyote Canyon: a little over two miles below Coyote Hole - drains Coyote Flat and Grassy Ridge on YP Desert.

      (2) Shea Canyon: about one mile above 45 Ranch - drains Shea Reservoir and Grassy Ridge area on YP Desert.

      (3) Box Canyon: about five miles below 45 Ranch - drains unnamed area of YP Desert, north of 45 Ranch.

2. Length

   a. South Fork Owyhee River: 28.0 miles

   b. Tributaries:

      1) Coyote Canyon: 1.0 miles

      2) Shea Canyon: 1.0 miles

      3) Box Canyon: 1.0 miles

      Total: 31.0 miles

3. Affected Non-federal Lands

   Private:

   South Fork Owyhee River Corridor: 400 acres

45 Ranch: T. 14 S., R. 5 W., Sec. 25, SE4NW4, E2SW4 SW4SE4.
T. 14 S., R. 5 W., Sec. 36, NE4NW4, NW4NE4.

Coyote Hole: T. 15 S., R. 4 W., Sec. 20, SE4.

4. Landscape Characteristics

The South Fork Owyhee River enters Idaho contained within a 550-foot deep, V-shaped, talus sloped canyon capped by a nearly continuous vertical-walled rimrock. The rimrock walls formed from the fracturing and erosion of a thin mantle of basaltic lava flows. The eroding cliffs have strewn large, blocky rock rubble into the canyon to mix with the smaller platelet-type rubble produced from the erosion of underlying rhyolitic rock. The resulting landscape is typified by extensive, relatively evenly laid talus slopes covered with a mosaic of sagebrush-grassland communities and rock rubble fields which are only occasionally broken by small, vertical-walled outcroppings of rhyolite or heaps of basalt rubble. The rubble heaps appear as hilly areas within the canyon. They extend southward from near the Nevada border for nearly four miles to the El Paso Gas Pipeline crossing. It is in these basaltic heap areas that boulders fill the river channel and create Class III to IV rapids. Another notable heap area is about 1.5 miles below Coyote Hole where Sentinel Rapid is located.

Underlying rhyolite bedrock does not emerge from the talus slopes in large amounts until about 3.5 miles upstream of Coyote Hole. As typical for the Owyhee Canyonlands, rhyolite bedrock appears as sheer-walled, fractured and diversely eroded rock monoliths; some of which rise directly from the river channel. Along most of its length, the river channel is defined by talus slopes nestled at the base of the rhyolite cliffs. By the time the river reaches within 1.5 miles of Coyote Hole it is fully engulfed within an inner gorge of rhyolite cliffs which rise upwards as much as 500 feet to be draped by talus slopes that extend another 300 vertical feet to the nearly continuous, meandering, vertical-walled basaltic rimrock.

The canyon opens up briefly at Coyote Hole, the location of a historic homestead. The river quickly submerges back into rhyolite cliffs where it remains until meeting the East Little Owyhee River at the 45 Ranch. Between Coyote Hole and the 45 Ranch the rhyolite cliffs reach heights of 700 feet and are fractured into a myriad of vertical, columnar forms; a number of which have eroded away from the main canyon walls to form pinnacles or spires known as "hoodoos." Sentinel Rapid below Coyote Hole is given its name because of the presence of a number of hoodoos, standing side-by-side, overlooking the rapid.

Two side canyons, each approximately one mile in length, jut away from the South Fork Canyon between Coyote Hole and the 45 Ranch. These side canyons have been named Coyote Canyon and Shea Canyon.

The side canyons carry only intermittent waters from spring snowmelt off the Grassy Ridge area of the YP Desert. The convoluted or hilly topography of Grass Ridge and the cliffs of the main South Fork Canyon merge to form the side canyons. As such, the side canyons are not distinctively separate from the main South Fork Canyon and have been incorporated into the South Fork's eligibility boundary: the same boundary established for the Owyhee Canyonlands Special Recreation Management Area (SRMA).

At the 45 Ranch, the East Little Owyhee River Canyon (segment S2a) joins with the South Fork. This river confluence has, over the centuries, widened the South Fork Canyon to about two miles. The adjoining Spring Creek has aided in the canyon's widening; creating Spring Creek Basin. This sagebrush-grassland basin continues downstream to the South Fork's confluence with the East Fork Owyhee River (segment S3a); the river canyon reaching depths of 600 to 700 feet. At this point the basin is named Juniper Basin. The basin or outer canyon is defined by an almost continuous, meandering, vertical wall of basalt atop steep talus rubble slopes. Through the middle of the basin the South Fork has carved a 300 to 400-foot deep, sheer-walled, meandering inner gorge through underlying rhyolite rock. Like the basaltic rimrock, the rhyolite cliffs are nearly continuous. The cutting action of the river in the inner gorge and the erosion of the basaltic mantle merge to create a convoluted topography within the basin. The inner gorge is characterized by the customary vertical, columnar fracturing. Hoodoo formations, however, are few until the South Fork reaches its confluence with the East Fork.

Within the meandering rimrocks of the outer canyon or basin about five miles below the 45 Ranch is a mile long, narrow, vertical-walled side canyon created by intermittent spring snowmelt from the northern YP Desert lying to the east of the South Fork. For the want of a better name, this side canyon is called Box Canyon because of its topographic isolation from the surrounding YP Desert plateau lands.

Because the side canyon is contained within the outer canyon or basin rimrocks of the South Fork, it too (like Coyote and Shea Canyons) is included entirely within the South Fork's eligibility boundary: Owyhee Canyonlands SRMA.

5. Cultural Modifications

Cultural modifications along the South Fork Owyhee River segment begin with the stateline fence which ends at the canyon's western rimrock. The "stateline " fence is actually .75 miles north of the Nevada stateline.

At mile-3 downstream of the stateline is the historic site of Bull Camp containing the ruins of two stone buildings. A trail extends from the site upslope to the canyon rimrock at the point where a primitive dirt road crosses the plateau from the east. A trail also does the same from the west side of the river.

Several miles further downstream the river crosses through private property (Coyote Hole) where ruins of another stone building can be found in association with a juniper/willow corral.

A primitive jeep road extends down the eastern slope of the canyon to give the historic site vehicle access.

At about mile-17.5 the river enters the influence zone of the active 45 Ranch. This zone, covering 1.5 miles of river, begins with the pooling of the river's flow behind a rock and earthen diversion dam constructed sometime prior to the mid-1970s. The construction resulted in the formation of a large borrow pit in the lower talus slope of the canyon and the development of a canal along the river's north shore. The canal system extends downstream for a distance of about .75 miles to the 45 Ranch hay meadows. This canal is closely paralleled by a maintenance road for the first .5 miles. The road then departs from the canal and traverses the base of the canyon's east slope to the ranch site itself. The ranch site has several contemporary houses and historic buildings, corrals, etc. Irrigated meadows cover the bottom lands adjacent to the river, surrounded, in part, by barbed wire fences. The irrigated lands extend to nearly the river's edge where willow and other riparian vegetation has been removed in the recent past; some regrowth is now occurring.

The canal road forks and crosses the South Fork at the confluence of the East Little Owyhee River. Once on the west shoreline, the dirt road again forks; one fork heading up the East Little Owyhee Canyon bottom for about .5 miles before ascending steeply up onto the Halogeton Flat area of the surrounding plateau lands. The other fork, after immediately passing a corral, travels downstream parallel to the river for about .5 miles. It then ascends steeply up the South Fork Canyon's lower slopes into the Spring Creek Basin (outer canyon) area; eventually climbing to the canyon's western rimrock lying over two miles away from the river.

The jeep trail up Spring Creek Basin forks two more times. One fork, heads northeastward, returning to the vicinity of the river where a fenceline crosses a knoll just above the river. This fenceline originates in a cliff area immediately adjacent to the river's west shoreline just downstream of the corral. The fence extends northward to where a steel cable is stretched across the South Fork to another cliff area adjacent to the river's east shore. At the base of the east shoreline cliffs, a dirt road is carved into the narrow talus slope immediately adjacent to the river. This road skirts the east side of the hay meadows from the ranch site. The road disappears along the river bottom just below the cable crossing.

The other fork of the jeep trail in Spring Creek Basin heads northward; traversing the base of the steep slopes forming the western flank of the Basin. The trail extends about two miles before ending at the lip of the South Fork's inner canyon. This route is not visible from the river.

The 45 Ranch site is accessed by a regularly maintained dirt road entering the canyon from the east. The road, as it switchbacks down the talus slope of the canyon, is readily visible from the river corridor in the Spring Creek Basin area below the East Little Owyhee River confluence.

Further downstream (one mile above the South Fork-East Fork confluence) where Spring Creek Basin becomes Juniper Basin, another primitive dirt road descends from the western rimrock to the historic ruins of a log cabin and corral. Once past the ruins the road turns to the south and travels within the basin for about one mile to a small developed spring site located on the western slope of the outer canyon.

6. Existing Land Management Designations

The entire lengths of the South Fork Owyhee River and its three small tributary canyons are contained within the Owyhee Canyonlands Special Recreation Management Area (SRMA). This designation is overlapped by the larger Owyhee River Area of Critical Environmental Concern, the South Fork Owyhee River Wilderness Study Area (WSA), and Owyhee River Canyon WSA. The South Fork Owyhee River WSA occurs south of the 45 Ranch. The Owyhee River Canyon WSA extends north of the 45 Ranch and includes not only the South Fork but also the main stem Owyhee River. The ACEC extends along the entire segment's length.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee wilderness inventory process rated the South Fork Owyhee River Canyon as having Class A scenic quality (see Wilderness Scenic Quality and Evaluation Form).

The scenic quality of the South Fork Owyhee River Canyon is attributed to a diversity of dramatic landscapes involving domination by either vertical or diagonal images. In the upper half of the canyon, generally from Bull Camp southward, the landscape is dominated by long diagonal lines framing triangular forms associated with talus slopes trapped within vertical lines and forms of a continuous rimrock. The black, coarse-textured rimrocks contrasts with the mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities found on the talus slopes. In some areas amidst the varying colors, lines, and forms of the talus slopes can be found sharply contrasting, coarse-textured heaps of blackish, irregularly shaped, rock rubble. In other areas, vertical, brownish, coarse textured, isolated rock monoliths pierce the talus slopes.

In the lower portion of the canyon, the landscape is dominated by high, vertical lines and forms of coarse-textured, brownish rock monoliths glazed with yellow to light green microflora. At the base of the cliffs are subordinate diagonal lines defining the relatively small triangular forms of talus slopes. The slopes are covered with a medium-textured mosaic of yellow to subdued green sagebrush-bunchgrass communities and fields of reddish-brown, flat platelet rock rubble.

A medium-textured, rich green, but quite narrow band of riparian vegetation follows the meandering line of a spring time river channel filled with fast-moving, brownish, silt-laden waters. In areas, the river channel contains stretches of large boulders and whitewater. As flows recede, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. Receding waters also expose the whitish, medium texture of river bottom gravel and boulders. The combinations of lines, forms, colors, and textures found amidst this close association of landforms, vegetation, and water create exceptionally scenic landscapes throughout the entire South Fork Canyon. Contributing significantly to the quality of the canyon landscape is the diversity offered by vertical cliffs and large talus slopes, and the array of hundreds of vertical pinnacles (hoodoos). From a scarcity standpoint, the sagebrush/rhyolite cliff and sagebrush/talus slope associations are widespread over southwest Idaho. However, the South Fork Owyhee River associations are among the best representation of the rhyolite/basalt canyon landscape in the geographic area.
Conclusion:

The entire South Fork Owyhee River segment offers a canyon landscape of diverse landforms, vegetation and water that possess scenic qualities of outstandingly remarkable value.

2. Recreational Values

The South Fork Owyhee River segment along its entire length is generally a Class II whitewater river with only several Class III or Class IV rapids. The historic float season has been from April through mid-June when flows have been between 1,000 and 30,000 cubic feet per second (cfs) on the Rome, Oregon, gauge. This equals to about 500 to 15,000 cfs on the South Fork. The recent drought years, and increased regional and national interest in the canoeing rivers, has encouraged the use of canoes on the South Fork at flows down to 200 cfs (Rome gauge). The capability of running the river at such low levels has extended the float season in normal water years into mid-July. The South Fork is regionally (Pacific Northwest, Utah, and California) recognized, as well as nationally known, for an outstanding wilderness-type river experience because of the canyon's scenic qualities, solitude opportunities, wildlife viewing opportunities, and length of trip available. To the open canoeist, the Owyhee River system offers one of the best float opportunities in the United States in a desert wilderness-type setting or any other environment. Based upon recorded use (1976-1989), and assuming less than one-half the visitors report their trips, it is estimated that the upper Owyhee River system receives over 1,000 user days of visitation in a normal water year. About 50% of the use originates on the South Fork; the remainder on the East Fork (see segment S3a). Approximately 30% of the use during a given year will occur from six authorized commercial outfitters.

The three short tributary canyons contribute to the float experience by providing short, day-hiking opportunities. The upper two tributary canyons, Coyote Canyon and Shea Canyon, are also principal routes used by backpackers to enter the middle section of the South Fork Canyon for overnight/multi-day trips along the river. Backpack trips have been known to follow the South Fork Canyon from Coyote Hole to Shea Canyon. The South Fork Canyon above Coyote Hole has not been known to be used to any extent for backpacking. The lower portion of the South Fork, below the 45 Ranch, has on occasion attracted hiking use. Backpackers are attracted to the South Fork Canyon for the same reasons that boaters are.

Most backpacking use of the Owyhee Canyonlands system occurs in the major tributary canyons such as Louse Canyon (West Little Owyhee River) in Oregon, Deep Creek (segments S4a, b, and c) and Battle Creek (Bruneau RMP). In these canyons, water levels are low enough for safe fording during the late spring/early summer and during the fall when air temperatures are cool. Without such larger tributary canyons, the South Fork Canyon will continue to receive minimal backpacking use and not attract use from outside the geographic area (southwest Idaho). Day-hiking, however, will continue to be a contributing factor to the quality of the float boat experience.

Conclusion:

The South Fork Owyhee River segment offers outstandingly remarkable float boating opportunities (rafting, kayaking, and canoeing) along its entire length. The three small tributary canyons of Coyote Canyon, Shea Canyon, and Box Canyon contribute to the quality of the float boating experience by providing quality day-hiking opportunities.

The South Fork Canyon and its tributary canyons are not expected to be major destination points for backpacking.

3. Geologic Values

Like most of the Owyhee Canyonlands, the South Fork Owyhee River segment with its short tributary canyons has geologic formations of volcanic origin (Miocene). The river exposes from 550 to 1,000 vertical feet of basaltic flows in combination with underlying rhyolitic welded tuffs and tuffaceous sediments. Ongoing weathering and erosion of the basalt and rhyolite has created a diverse mixture of sculptured rock formations and talus rubble fields, including some concentrated areas of individual spires or pinnacles known as “hoodoos.”

Basaltic and rhyolitic cliff formations are not unique to Southwest Idaho. However, the Owyhee Canyonland system provides a great abundance of large-sized formations comparable to those of the Bruneau-Jarbidge River system. Both these systems provide the largest concentration of sheer-walled rhyolite/basalt canyon systems in the western United States. The concentration of formations along the South Fork is unique within the Owyhee Canyonlands itself because it provides the greatest diversity of basalt and rhyolite landform associations within any one major fork or tributary of the Owyhee River system.

Conclusion:

The geologic features of the South Fork Owyhee River Canyon contribute significantly to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified seven species of fish in the South Fork Owyhee River segment, including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, northern squawfish, and redband trout. More recent information indicates a sizeable population of smallmouth bass now occupies the waters of the Owyhee River and lower South Fork. This population has been moving upstream from Oregon. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the South Fork Owyhee River segment is presently judged to be in unsatisfactory (fair to poor) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway on tributary streams to improve habitat conditions through changes in grazing practices. Such efforts may improve summer flow levels, reduce siltation, and decrease temperatures. But the expected degree of change in these factors coupled with the inability to alter the availability of cover will not make a substantial change in the present condition of fisheries habitat along the South Fork Owyhee River. Water quality conditions coming into the river segment from Nevada are not good, but portions of the South Fork could produce large trout (15" plus) if habitat is improved. The migration (seasonal) of smallmouth bass into the upper Owyhee River system over the past decade suggests that conditions may favor the development of a significant warm water fishery resource within the lower South Fork Owyhee River (below the 45 Ranch). There is competition for food and space between smallmouth bass and trout, and current habitat conditions (mainly water quality) favor smallmouth bass.

The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It appears from a cold water fisheries perspective that this situation may not be achievable on the South Fork Owyhee River. However, improving conditions on the South Fork, even to a small degree, could allow a smallmouth bass populations (warm water fishery) to prosper: a unique situation for resource area streams. As such, there is the potential for an outstandingly remarkable warm water fishery.

The tributary streams of Coyote, Shea, and Box Canyon have no opportunity for other than a minimal fisheries resource because of their intermittent nature.

Conclusion:

The South Fork Owyhee River segment and its small tributary streams do not presently have outstandingly remarkable fisheries values. However, some improvement in fisheries habitat could result in the development of an outstandingly remarkable warm water fishery on the South Fork Owyhee River.

5. Wildlife Values

The South Fork Owyhee River Canyon provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, California bighorn sheep, and possible the Preble's shrew.

The waters along the entire length of the South Fork Owyhee River are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). Otter sightings are commonplace on float trips, particularly at lower flows. The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. Bald eagles (a federally listed endangered species) occasionally winter in small numbers along the canyon walls of the upper Owyhee River system. These cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) inhabit the entire length of the canyon system from Juniper Creek downstream into Oregon. The South Fork supports a small portion of the estimated 700 sheep now populating the Owyhee Canyonlands in Idaho. The entire South Fork Canyon, however, is suitable habitat for bighorn sheep. Most of the Owyhee Canyonlands present population is in the East Fork canyon system. The Owyhee Canyonlands population equates to about 10 % of the world population. The South Fork Owyhee River Canyon is considered a habitat of national significance.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States. The South Fork's riparian zone does not contain a diverse species composition; what there is of the riparian habitat is in less than satisfactory condition (Owyhee MSA). Species diversity is limited by the annual scouring of the river channel and shoreline by high flows. The upland habitats within the canyons, which include many topographically isolated slopes nestled amid cliffs, are in good to excellent condition (Owyhee MSA). A canyon system of such large size, and containing areas of good to pristine habitat, possesses outstanding wildlife values. When the South Fork segment is looked at in combination with the East Fork segment (S3a), the Owyhee River system in Oregon and major tributary systems, such as the North Fork Owyhee River (C5a and b) and Deep Creek (S4a,b,c, and S7a) where additional riparian and upland vegetation species diversity exists, the Owyhee Canyonlands system as a whole is a wildlife habitat area of national, if not international, significance.

The smaller tributary canyons of Coyote, Shea, and Box Canyons contribute to the overall quality of canyonlands wildlife habitat in the Owyhee River system and are, therefore, considered to have outstanding wildlife values.

Conclusion:

The South Fork Owyhee River Canyon, in combination with its small tributary canyons, possesses outstandingly remarkable wildlife values. The river segment contributes significantly to the overall value of the Owyhee Canyonlands system as a nationally, if not internationally, significant wildlife habitat area.

6. Prehistoric Cultural Values

There are numerous prehistoric archaeological sites which have been discovered along the rimrock areas of the South Fork Owyhee River and its "sister" canyons, as well as on surrounding plateau lands of Idaho. However, few sites have been located within the Owyhee Canyonlands of Idaho except in rock shelters tucked away at the bases of cliffs. It is thought that what sites may have existed adjacent to the river have long since been destroyed by the frequent springtime floods and the continual realigning of the meandering river channel.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the South Fork Owyhee River cannot be determined at this time.

7. Historic Cultural Values

The ruins of historic stone and wooden (log) buildings, are representative of those constructed during the late-19th and early-20th centuries are found along the South Fork Owyhee River. These sites occupy both federal and private (Coyote Hole and 45 Ranch) properties. None of the sites are judged to qualify for the National Register of Historic Places (NRHP) based upon their individual significance. Taken collectively, however, they would probably qualify for inclusion on the NRHP as contributing elements of a Historic Site District centered on early ranching within the various tributaries of the Owyhee River. The sites are judged to be a significant resource which contributes to the recreational experience along the river corridor.

Conclusion:

A number of historic sites exist along the South Fork Owyhee River which add significantly to the recreational experience of the river corridor, and may collectively qualify for inclusion on the National Register of Historic Places. However, individual sites are not judged to be of outstandingly remarkable historic value when considered in perspective to historic resources in southwest Idaho as a whole.

8. Other Similar Values

No other outstandingly remarkable values are identified for the South Fork Owyhee River segment.

III. Eligibility and Classification

A total of 28.0 miles of the South Fork Owyhee River (segment S1a, b and c) are eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, and wildlife values. The river segment also has the potential for outstandingly remarkable fisheries values.

The 17.5 miles extending downstream from the Nevada stateline to the 45 Dam and the 9.0 miles extending downstream from the northern property boundary of the 45 Ranch to the confluence with the East Fork Owyhee River should be classified as a potential wild river. Cultural modifications associated with historic sites and their jeep trail/road access are not sufficient to warrant a less restrictive classification.

The 1.5 miles extending downstream from the 45 Dam to the northern property boundary of the 45 Ranch should be classified as a potential recreational river. Existing cultural modification (ranch site with diversion dam/canal, hay meadows, roads, fences, etc.), and the continued use and maintenance of these developments warrants a less restrictive classification.

The intermittent tributary streams of Coyote Canyon, Shea Canyon, and Box Canyon, though contributing to a number of outstandingly remarkable values, should not be identified as individual eligible streams. In all three cases (totalling 3.0 miles), these stream segments lie entirely within the eligibility boundary (Owyhee Canyonlands SRMA) for the South Fork Owyhee River Canyon. A separate delineation is not warranted.

Classification Considerations for the Owyhee RMP:

A BLM suitability recommendation for the South Fork Owyhee River needs to support the continued viable operation of the 45 Ranch, including recurring major maintenance work on the 45 Dam. This maintenance has require instream reconstruction of the dam following high water damage and the rebuilding of the canal and access road. Future maintenance may require the removal of borrow materials from the canyon slopes downstream of the dam structure. The existing rehabilitated borrow pit above the dam will not be re-opened. Should the dam need reconstruction, the existing "boatable" spillway must be retained.

It is presently the intent of the 45 Ranch to place a steel bridge across the South Fork below the East Little Owyhee River confluence and to utilize low-water fence systems across the South Fork. The BLM should work with the 45 Ranch to ensure public boating safety on these projects.

The BLM is proposing to acquire a recreational and scenic easement for lands within the 45 Ranch properties. The recreational easement is needed to secure public access to the lower (northern) end of the properties and to develop a small boating launch site. The scenic easement would deal with issues relating to the ranch site operation itself, including the possible bridge crossing.

Lower East Little Owyhee River
Segment S2a

I. Physical Description

1. Location: From east boundary of the Star Valley Ranch properties downstream to the confluence with the South Fork Owyhee River.

2. Length: 9.5 miles

3. Affected Non-federal Lands

Private: 40 acres

T. 16 S., R. 5 W., Sec. 9, SW4SW4.

State: 160 acres

T. 16 S., R. 5 W., Sec. 16, N2N2.

4. Landscape Characteristics

The free-flowing lower East Little Owyhee River segment begins at the downstream (east) end of the Star Valley Ranch properties. At these properties, the thin mantle of basalt rock, which covers the three state area (Idaho, Oregon and Nevada), has been eroded away by the confluence of several major drainages to form a small basin area in which the ranch site is nestled. The confluence is that of the East Little Owyhee River, Tent Creek and a short, unnamed draw. After departing the confluence area, the East Little Owyhee River cuts a narrow (about one-quarter mile wide) gorge into the basalt mantle and underlying rhyolite rock. The canyon walls immediately reach to a height of 400 feet. In the lower elevations of the gorge the rhyolite rises vertically from within or near the river channel to form highly fractured rock monoliths which take on columnar forms; few, however, have eroded away from the cliffs to form "hoodoos" as is common throughout the Owyhee Canyonlands system. Above the inner gorge, basalt rubble forms steep talus slopes that rise to a nearly continuous, vertical basaltic rimrock. Within the first three miles of the canyon, four relatively large side draws help shape the canyon's topography. Rhyolite cliffs remains a dominant feature at the lower elevations. After mile three, the rhyolite generally becomes submerged beneath a blanket of basaltic rubble as the canyon widens to a about one-half mile. The landscape becomes that of a 700-foot deep, V-shaped, talus sloped canyon capped by a nearly continuous vertical-walled rimrock. The talus slopes are relatively evenly laid and are covered with a mosaic of sagebrush-grassland communities and rock rubble fields which are only occasionally broken by small, vertical-walled outcroppings of rhyolite or heaps of basalt rubble. The underlying rhyolite bedrock does not re-emerge from the talus slopes in large amounts until about 1.5 miles upstream of the confluence with the South Fork Owyhee River near the 45 Ranch.

5. Cultural Modifications

Cultural modifications along the lower East Little Owyhee River are limited to two areas. In the vicinity of the Star Valley Ranch, two fences have been constructed across the river. The first is at the very beginning of the river segment (mile-0.1); the other at mile-0.7. The first fence skirts along the base of the cliffs to the east of the ranch site and crosses the river at the mouth of the canyon on State of Idaho lands. The second fence is the continuation of a fenceline which crosses the plateau south of the river and extends over the canyon rimrock onto the upper elevation talus slopes. This fence also lies on State of Idaho lands. Within .5 miles downstream of the second fence are two old pack trails identified on USGS topographic maps. The condition of these trails is unknown.

As the river segment merges with the South Fork Owyhee River Canyon, a primitive dirt road parallels the East Little Owyhee River. The road extends from the river confluence upstream along the west shore of the East Little Owyhee River for a distance of about .75 miles before crossing and climbing eastward out of the canyon. This road serves as the primary access route onto the 45 Plateau from Idaho and is periodically maintained; however, the use of 4-wheel drive vehicles in required because of the steep road grade, etc. As described in the South Fork assessment (see segment S1a-c), there is a small corral at the river confluence.

6. Existing Land Management Designations

Most of the lower East Little Owyhee River segment lies within the East Little Owyhee River Wilderness Study Area (WSA). The state land area at the beginning of the segment is not within the WSA. The northernmost stretch of the river, from the road crossing downstream, is also not in the WSA. It is, however, within the boundary of the Owyhee Canyonlands Special Recreation Management Area (SRMA). This designation, as well as part of the WSA, is overlapped by the Owyhee River Area of Critical Environmental Concern (ACEC). The ACEC designation extends up the East Little Owyhee River Canyon for a distance of about 4.5 miles.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee wilderness inventory process rated the lower East Little Owyhee River Canyon as having an overall low-Class B scenic quality (see Wilderness Scenic Quality and Evaluation Form).

Throughout most of its length, the landscape of the East Little Owyhee River Canyon is dominated by long diagonal lines framing triangular forms associated with talus slopes trapped within vertical lines and forms of a continuous rimrock. The black, coarse-texture of the rimrocks contrasts with the mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities found on the talus slopes. In some areas amidst the varying colors, lines, and forms of the talus slopes can be found sharply contrasting, coarse-textured heaps of blackish, irregularly shaped, rock rubble. In other areas, vertical, brownish, coarse-textured, isolated rock monoliths pierce the talus slopes. It is in the rhyolite/basalt associations that the canyon is the most scenic. Water contributes to scenic quality during spring snowmelt by adding sparkling, flowing, rich brown colors that are frequently blended with black channel boulders and whitewater. By mid-summer, the affects of moving water are replaced by the whitish colors of silt-laden channel gravels and standing pools of tinted green water. From a scarcity standpoint, the sagebrush/rhyolite cliff and sagebrush/talus slope associations are widespread over southwest Idaho. Other stretches of river, including the adjacent South Fork Owyhee River, provide a better (more scenic) representation of the rhyolite/basalt canyon landscape in the geographic area.

Conclusion:

The scenic quality of the lower East Little Owyhee River Canyon is considered to be a significant resource, particularly in the rhyolite/basalt associations, but it is not considered an outstandingly remarkable value.

2. Recreational Values

The lower East Little Owyhee River is not, from a logistical standpoint, a boatable stream. The canyon can be readily backpacked in the spring months when water remains available. However, the scenic quality of the canyon is not considered high enough to attract recreation users from outside the geographic area. Most backpacking use of the Owyhee Canyonlands system occurs in the more scenic major tributary canyons such as Louse Canyon (West Little Owyhee River) in Oregon, Deep Creek (segments S4a, b, and c) and Battle Creek (Bruneau RMP). In these canyons, water levels are low enough for safe fording during the late spring/ early summer and during the fall when air temperatures are cool. This assessment is consistent with that of the wilderness inventory: the East Little Owyhee River WSA lacks outstanding opportunities for primitive recreation values, though is does possess outstanding opportunities for solitude.

Conclusion:

The lower East Little Owyhee River Canyon is lacking in outstandingly remarkable recreational values. The canyon is not expected to be a major destination point for backpacking or other outdoor activities.

3. Geologic Values

Like most of the Owyhee Canyonlands, the lower East Little Owyhee River segment has geologic formations of volcanic origin (Miocene). The river exposes over 700 feet of basaltic flows in combination with underlying rhyolitic welded tuffs and tuffaceous sediments. Ongoing weathering and erosion of the basalt and rhyolite has created a mixture of sculptured rock formations and talus rubble fields.

Basaltic and rhyolitic cliff formations are not unique to Southwest Idaho. The Owyhee Canyonlands system provides a great abundance of large-sized formations comparable to those of the Bruneau-Jarbidge River system. Both these systems provide the largest concentration of sheer-walled rhyolite/ basalt canyon systems in the western United States. The canyon of the lower East Little Owyhee River contributes to the overall geologic value of southwest Idaho's canyonlands. However, the formations found in association with the East Little Owyhee River are the least diverse of any river segment in the region.

Conclusion:

The geologic features of the lower East Little Owyhee River are considered to be a significant resource value; however, they are not judged to be an outstandingly remarkable value because of their limited diversity.

4. Fisheries Values

Fisheries habitat conditions in the lower East Little Owyhee River segment have not been inventoried. The segment is intermittent and presently has very limited fishery value. Efforts are underway to improve habitat conditions through changes in grazing practices. While such efforts may improve flow levels (at least seasonally), reduce siltation, decrease temperatures, and enhance cover, what the overall benefit to fisheries will be on this segment cannot be speculated. It is hoped that a notable improvement in seasonal migratory use of the river's lower reaches will occur from the South Fork Owyhee River. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It appears that this situation will not be achievable on the lower East Little Owyhee River.
Conclusion:

The lower East Little Owyhee River segment does not presently have outstandingly remarkable fisheries values. It is not expected that improvements in fisheries habitat will result in the development of an outstandingly remarkable fishery.

5. Wildlife Values

The lower East Little Owyhee River Canyon provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and California bighorn sheep. River otter, beaver, and muskrat may use the river's lower reaches near the confluence of the South Fork Owyhee River on a seasonal basis when flows are sufficient (spring and early summer).

The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. A small number of bald eagles (a federally listed endangered species) occasionally winter along the canyon walls of the upper Owyhee River system. These cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

A small number of California bighorn sheep (sensitive species) inhabit at least the lower four miles of the East Little Owyhee River Canyon within the Owyhee River ACEC. The ACEC in Idaho supports an estimated 700 sheep. This number equates to about 10 % of the world population. All canyons of the Owyhee River system which are utilized by bighorn sheep are considered habitats of national significance.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States. While the East Little Owyhee River's does not contain as diverse a species composition as some of its "sister" tributary streams, what species are present are found in abundant numbers. The East Little Owyhee

River's riparian habitat is suspected to be in fair condition. Additional vegetative inventories are needed. It is suspected that species diversity may be limited by the annual scouring of the river channel and shoreline by high flows as well as by summer dry-out. The upland habitats within the canyons, which include many topographically isolated slopes nestled amid cliffs, are in good to excellent condition (Owyhee MSA). A canyon system of such large size, and containing good to pristine habitat, possesses outstanding wildlife values. When the East Little Owyhee River segment is looked at in combination with the East Fork (S3a) and South Fork (S1a-c) segments, the Owyhee River system in Oregon and major tributary systems, such as the North Fork Owyhee River (C5a and b) and Deep Creek (S4a,b,c, and S7a) where additional riparian and upland vegetation species diversity exists, the Owyhee Canyonlands system as a whole is a wildlife habitat area of national, if not international, significance.

Conclusion:

The lower East Little Owyhee River Canyon possesses outstandingly remarkable wildlife values. The river segment contributes significantly to the overall value of the Owyhee Canyonlands system as a nationally, if not internationally, significant wildlife habitat area.

6. Prehistoric Cultural Values

There are numerous prehistoric archaeological sites which have been discovered along the rimrock areas of the Owyhee River Canyon and its "sister" canyons, as well as on surrounding plateau lands of Idaho. However, few sites have been located within the Owyhee Canyonlands of Idaho except in rock shelters tucked away at the bases of canyon cliffs. It is thought that what sites may have existed adjacent to the river have long since been destroyed by the frequent springtime floods and the continual realigning of the meandering river channel. Tributary canyons, such as that of the East Little Owyhee River, may contain sites unaffected by erosion. Intensive cultural inventories along the lower East Little Owyhee River have not been undertaken nor are they currently planned.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the lower East Little Owyhee River cannot be determined at this time.

7. Historic Cultural Values

There are no known historic sites along the lower East Little Owyhee River.

Conclusion:

No outstanding remarkable historic values exist along the lower East Little Owyhee River segment.

8. Other Similar Values

No other outstandingly remarkable values are identified for the lower East Little Owyhee River segment.

III. Eligibility and Classification

There are 9.5 miles of the lower East Little Owyhee River which are eligible for further consideration as a congressionally designated river because of outstandingly remarkable wildlife values.

The 9.5 miles extending downstream from the Star Valley Ranch properties to the crossing of the dirt road .75 miles above the South Fork Owyhee River confluence should be classified as a potential wild river. Cultural modifications associated with livestock fences and pack trails are not sufficient to warrant a less restrictive classification. The .75 miles of river from the road crossing to the South Fork confluence should be classified as a potential recreational river because of the paralleling, periodically maintained dirt road.

Classification Considerations for the Owyhee RMP:

The South Fork Owyhee River (segment S1a-c) suitability classification calls for retaining the river corridor in the vicinity of the 45 Ranch as a recreational river to allow for development and maintenance options relating to the operation of the ranch site. The recreational classification for the last .75 miles of the lower East Little Owyhee River is consistent with the South Fork proposal.

Owyhee River - East Fork and Small Tributaries

Segments S3a, S3b, S3d, S3e, S3f, and S3g

I. Physical Description

1. Location

a. Owyhee River - East Fork: Oregon stateline upstream to west boundary of Duck Valley Indian Reservation.

b. Bald Mountain Canyon Creek: Canyon drop-off near headwaters downstream to confluence with Owyhee River.

c. Porcupine Creek: Lower stretch from fenceline south of Twin Springs property (private) downstream to confluence with East Fork Owyhee River.

d. Piute Creek: Head of lower canyon at road crossing near Piute Basin Camp downstream to confluence with East Fork Owyhee River.

e. Juniper Creek: Head of lower canyon at road crossing downstream to confluence with East Fork Owyhee River.

f. Dukes Creek: Headwaters downstream to confluence with Owyhee River.

2. Length (preliminarily eligible only)

a. Owyhee River - East Fork:	66.0 miles
b. Bald Mountain Canyon Creek:	3.0 miles
d. Porcupine Creek:	1.75 miles
e. Piute Creek:	3.0 miles
f. Juniper Creek:	3.0 miles
g. Dukes Creek:	3.0 miles
Total:	79.75 miles

3. Affected Non-federal Lands

Private:

East Fork Owyhee River Corridor: 440 acres

T. 14 S., R. 2 W., Sec. 1; S2NW4, E2SW4, S2SE4.
T. 14 S., R. 2 W., Sec 2; N2SW4, SW4NE4, NW4SE4.
T. 15 S., R. 1 W., Sec. 19; NE4NW4.

State:

Juniper Creek corridor: 640 acres

T. 15 S., R. 1 W., Sec. 16.

4. Landscape Characteristics

This river segment description includes the Owyhee River and East Fork Owyhee River as well as several (5) short tributary streams, including Bald Mountain Canyon Creek, Dukes Creek, Porcupine Creek, Piute Creek, and Juniper Creek. Each of these tributary segments lie, in part, within the established Owyhee Canyonlands Special Reservation Management Area.

The East Fork Owyhee River begins its free-flowing journey through this segment within a 250-foot deep, steep sloped canyon of rhyolite talus rubble that originally forms about five miles upstream in the Duck Valley Indian Reservation. Once on public lands, the canyon's character quickly changes to that of a sheer-walled chasm where rhyolite cliffs rise directly from the waters on both sides of the channel. At the base of the cliffs, water seeping from fractures nourishes lush, clinging plant communities. The cliffs continue for about ten miles before passing beneath the El Paso Gas Pipeline in a narrow gorge known as Garat Gorge. Within this gorge is a series of large boulder falls that cause technically difficult whitewater rapids, some of which warrant portaging. Above the gorge there is an outer canyon area of steep slopes covered within basalt rock rubble from surrounding plateau rimrocks. Intermixed with the rubble field are communities of sagebrush and bunchgrass.

Downstream of the pipeline crossing the canyon steadily increases in depth until it reaches a depth of near 1,000 feet just downstream of the South Fork Owyhee River confluence (see segment S1a, b, and c). The canyon depths are defined by an association of sheer rhyolite cliffs and steep talus slopes. The cliff areas are diversely eroded into a myriad of fractured monolithic columnar forms. Below the South Fork confluence, the columnar forms have been separated by erosion from the main cliff walls to create hundreds and hundreds of rock spires or pinnacles known as "hoodoos." At the base of the cliffs, small talus slopes covered with grass and large sagebrush shape the meandering character of the river's shoreline. In several places, however, the most notable being in the Lambert Gorge on the lower end of the East Fork, the rock walls rise hundreds of feet directly from the river channel.

Upstream of the Lambert Gorge, the steep talus slopes are generally found on the inside of the bends of the river's meandering course. They are characterized by a mosaic of rhyolite platelet rubble fields and grasslands-sagebrush communities. These slopes climb to the full height of the canyon and rap around the tops of cliffs forming the outside of the meanders. The meanders of the middle East Fork are so prominent that at one point the ancient riverbed has been cut off from the present river channel to isolate about one mile of canyon. This formation is known as an oxbow. This particular oxbow is called "The Tules" because of its lush riparian, almost swamp-like conditions in the ancient riverbed.

At the head of the Lambert Gorge, the rhyolite rock is topped with a thin mantle of basalt. The basalt fractures and breaks away into talus slopes and sheer rimrock formations set back from the underlying rhyolite cliffs. Within the Lambert Gorge, large basalt rubble has fallen into the river to create a large unboatable cascade known as Owyhee Falls and a technically difficult rapid called Thread the Needle. Once topped by the basalt, the canyon's character is much less meandering and is dominated by nearly continuous sheer cliffs on both sides of the river. What meandering of the rivers course does occur is influenced by the small talus slopes nestled at the base for the immense cliffs.

Merging with the Owyhee River Canyon about eight miles upstream of the Oregon border is Bald Mountain Canyon. The canyon merges with the Owyhee River Canyon from the north at the point of its maximum depth: 1,000 feet. However, Bald Mountain Canyon is less than one-half the width of the main Owyhee River Canyon. This immense, narrow gorge is a day hike which cannot be missed if you are floating the upper Owyhee River system. A visitor is completely swallowed by fractured, vertical-walled rock monoliths rising into a explosion of diversely eroded rock spires. At the base of cliffs, water seeps from the fractures to nourish small, lush, clinging plant communities thriving in the perpetual coolness of the chasm. The springs and seeps provide water year-around but not at a level which will maintain surface flows in the summer. Surface waters traveling within the channel occur during a brief time in the spring when snows are melting from nearby Bald Mountain and surrounding convoluted plateau lands.

About three miles further downstream toward Oregon another gorge somewhat similar in character to that of Bald Mountain Creek has also formed from intermittent flows (snowmelt) off of Bald Mountain. This gorge is that of Dukes Creek. The difference between the two canyons is that Dukes Creek's topography in its upper 200 feet of height is more spread out; giving it a somewhat less dramatic visual impact.

Above Lambert Gorge, in the Rickard Crossing area downstream of the Deep Creek confluence, a small stream called Porcupine Creek drains the southeast portion of Lambert Table (the basaltic mantle previously described). The lower 1.75 miles flows south to the East Fork Owyhee River through a hilly plateau country (Sheep Hills) having topographic relief of about 200 feet. About one-half mile north of the East Fork, the creek has cut downward to help form the East Fork's canyon. Water flows principally come from spring snowmelt; however there is a series of springs at the base of Lambert Table which supply some year-long water but not in sufficient volume to maintain surface flows to the East Fork.

Further upstream, joining the East Fork Owyhee River from the south, is Piute Creek. The lower canyon of this creek has a landscape characteristic of the East Fork's canyon previously described. The canyon of Piute Creek reaches a depth of over 400 feet when it joins the East Fork. The sheer-walled canyon disappears about one mile above the confluence to be replaced by a V-shaped canyon cutting through a convoluted plateau landscape. Topographic relief at the head of the stream segment near Piute Basin Camp is above 100 feet.

Lastly, Juniper Creek enters the East Fork Owyhee River Canyon from the south, upstream of the Garat Gorge. The stream meanders through a shallow canyon, with a maximum depth of about 200 feet, along the northwest flank of Juniper Basin. The canyon is known as Hole Up

Canyon. About one-half mile to three-quarter mile to the west is a basaltic rimrock resting 300 feet above the floor of Juniper Basin which contributes notably to the characteristic landscape within the stream corridor. The creek does not flow during the summer months; mustering at best small pockets of standing water in the channel gravels.

5. Cultural Modifications

Man's influence along the river segments are limited to those found along the East Fork Owyhee River and Piute Creek. Beginning upstream at approximately mile-13 from the Duck Valley Indian Reservation is Garat Crossing which includes both a crossing of the El Paso Gas Pipeline and its original construction/service road. The road crosses the river about one mile below the pipe itself. The road is the principal access for those wishing to float the East Fork. An informational board (kiosk) is located at this site. About 1.5 miles below the Garat Crossing is a 40-acre private parcel containing the historic ruins of a stone building.

The confluence area of Battle Creek also contains several historic ruins on private ground (2 parcels), including stone buildings and a water wheel which rests in the river channel. Primitive jeep trails access each of these private parcels; one from the north and one from the south.

A primitive dirt road approaches the East Fork several miles below the Deep Creek confluence at what is known as Rickard Crossing. The road does not reach the river; however, a notable livestock trail extends from the road's end to the flats along the river.

At Crutcher Crossing, a parcel recently purchased by the BLM with Land and Water Conservation Funds located about two miles upstream of the South Fork - East Fork confluence, there are several historic buildings and a corral. A road extends from the canyon rimrocks along both sides of the river to the historic site. These roads occasionally are used to access the river for boating opportunities. There is also evidence of small scale mining activity at the crossing near the south side of the river.

A primitive jeep trail reaches to the river from the north, extending off of Dickshooter Ridge across from the confluence of Piute Creek. This is a remnant of an old CCC road which crossed the river and proceeded up Piute Creek before ascending to the plateau about one mile from the confluence. At the point of ascent is evidence of the old roadbed cut and rock wall on the west slope of Piute Canyon.

A historic pack trail known as the Wilson Trail is noted on the topographic maps (Bull Basin Camp) near the confluence of Bald Mountain Canyon, but this trail has not been visible on float trips.

Lastly, several isolated fences occur in the rimrock areas along the Owyhee River-East Fork segment and its tributary canyons. A fence crosses Porcupine Creek at the beginning of that segment.

6. Existing Land Management Designations

The entire length of the Owyhee River-East Fork segment lies within the Owyhee Canyonlands Special Recreation Management Area (SRMA) established by the Owyhee MFP (1981). This segment is also overlaid by the Owyhee River Area of Critical Environmental Concern (ACEC).

Much of Bald Mountain Canyon, Dukes Canyon, and Hole Up Canyon (Juniper Creek) are also contained within the SRMA/ACEC boundaries. Only about the lower one-half mile of both Porcupine and Piute Creek are contained in the SRMA, but they are predominately within the ACEC boundary.

All stream segments discussed in this document are contained in the Owyhee Canyonlands Wilderness Study Area complex (WSAs ID-16-48B, 49A, 49D, and 52, and 111-49E) except the upper half of Juniper Creek.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the Owyhee River-East Fork canyon complex as having Class A scenic quality. This scenic quality rating was reaffirmed during the wilderness inventory process (see Wilderness Scenic Quality Inventory and Evaluation Forms).

The scenic landscapes of the Owyhee River-East Fork Canyon and its tributary canyons are, in part, dominated by a mixture of high, vertical lines and forms of coarse-textured, brown to blackish eroded cliffs, often glazed with yellow to light green microflora. Intertwined with the vertical features on much of the East Fork are diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities. A medium-textured, rich green but quite narrow band of riparian vegetation follows the meandering line of a spring time river channel filled with fast-moving brownish, silt laden waters The river channel contains some stretches of whitewater rapids and immense boulders. As water recedes, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. Receding waters also expose the whitish, medium-textured river bottom gravels and boulders. The combination of lines, forms, colors, and textures found amidst this close association of landforms, vegetation, and water create exceptionally scenic landscapes in all but the upper most reaches of Juniper and

Piute Creek and along most of Porcupine Creek where rolling plateau landscapes prevail. Contributing significantly to the quality of the canyon landscapes is 1) the interchange of vertical cliffs and talus slopes as the East Fork follows an extremely meandering course, and 2) the array of hundreds and hundreds of individual pinnacles (hoodoos) along the main Owyhee River. From a scarcity standpoint, the sagebrush/rhyolite cliff association is widespread over southwest Idaho. However, the Owyhee River-East Fork associations are among the best representation of the rhyolite canyon landscape in the geographic area, particularly the Owyhee's extensive hoodoo formations. They are compatible to those of the Bruneau-Jarbidge River system.

Conclusion:

The entire Owyhee River-East Fork segment, the entire length of Bald Mountain Canyon and Dukes Canyon, the lower portions of Juniper Creek and Piute Creek offer canyon landscapes of diverse landforms, vegetation and/or water that possess scenic qualities of outstandingly remarkable value.

The scenic qualities of rolling plateau lands adjoining the Porcupine Creek segment and the upper portion of Piute and Juniper Creeks, are not considered to be outstanding.

2. Recreational Values

The Owyhee River-East Fork segment along its entire length is generally a Class II whitewater river, with several sections of Class IV through VI in the Lambert and Garat Gorges. The historic float season has been from April through mid-June when flows have been between 1,000 to 30,000 cubic feet per second (cfs) on the Rome, Oregon, gauge. This equates to about 500 to 15,000 cfs on the East Fork. With recent drought years and increased regional and national interest in the open canoeing of rivers, float trips have been run with canoes at flows down to 200 cfs (Rome gauge). The capability of running the river at such low levels has extended the float season in normal water years into mid-July. The Owyhee-East Fork is regionally (Pacific Northwest, Utah and California) recognized, as well as nationally recognized, for an outstanding wilderness-type river experience because of the canyon's scenic qualities, solitude opportunities, wildlife viewing opportunities, and length of trip available. To the open canoeist, the Owyhee River system offers one of the best float opportunities in the United States in a wilderness-type desert environment or any other environment. Based upon recorded use (1976-1989), and assuming less than one-half the visitors report their trips, it is estimated that the upper Owyhee River system receives over 1,000 user day of visitation in a normal water year. About 50% of this use originates on the East Fork; the remainder on the South Fork (segment S1a, b and c). Approximately 30% of the use during a given year will occur from commercial outfitters. Presently, six commercial outfitters are authorized to run trips on the upper Owyhee River system.

The tributary canyons of the Owyhee River-East Fork, including those of Bald Mountain Canyon Creek, Dukes Creek, Red Canyon Creek (segment S5a), Deep Creek (segment S4a), Piute Creek, Battle Creek (Bruneau RMP), Yatahoney Creek (Bruneau RMP) and Juniper Creek, contribute significantly to the float boating experience on the Owyhee River-East Fork segment by providing exceptional day-hiking opportunities. Deep Creek is also floatable during a short time in the spring. Porcupine Creek, however, does not attract visitation on river trips because of the lack of significant or outstanding scenic qualities as well as the lack of available campsites in the immediate area of its confluence with the East Fork.

The entire Owyhee River-East Fork canyon system attracts some backpacking use from the Pacific Northwest (PNW) region during low-water periods for the same reason that boaters use the area. This use occurs during the cooler fall months. Most backpacking use of the Owyhee Canyonlands system is presently occurs in the major tributary canyons such as Louse Canyon (West Little Owyhee River) in Oregon, Deep Creek (Segments S4a,b,c) and Battle Creek (Bruneau RMP). In these canyons water levels are low enough for safe fording during the cooler late spring/early summer months. During the months the East Fork and main stem Owyhee River canyons are also utilized in conjunction with the tributary canyons.

Conclusion:

The Owyhee River-East Fork segment offers outstandingly remarkable float boating opportunities (rafting, kayaking, and canoeing) along its entire length. The tributary canyons of Bald Mountain Canyon Creek, Dukes Creek, Piute Creek, and Juniper Creek contribute to the outstanding river running experience by providing exceptional side-hiking experiences. Porcupine Creek does not contribute to outstandingly remarkable recreation opportunities.

While the Owyhee River-East Fork segment and its smaller tributary canyons tend not to be major destination points for backpacking, they contribute to the overall outstandingly remarkable backpacking opportunities found in the Owyhee Canyonlands system as a whole when considered in conjunction with the use of major tributary canyon systems.

3. Geologic Values

Like most of the Owyhee Canyonlands, the Owyhee River-East Fork segment along with its tributary canyons have geologic formations predominately of volcanic origin (Miocene). The Owyhee River-East Fork segment, Bald Mountain Canyon Creek, Dukes Creek, Piute Creek, and Juniper Creek expose 200 to 1,000 vertical feet of rhyolitic welded tuffs and tuffaceous sediments. Atop the rhyolite from Lambert Gorge downstream to the Oregon border, and in the area of the Garat Gorge and Juniper Basin, is a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured monolithic rock formations along its entire maundering course, including a large concentration of individual spires or pinnacles known as "hoodoos" in the main Owyhee River canyon between the Oregon border and Crutcher Crossing (just above the South Fork-East Fork confluence). The meandering course of the middle East Fork has resulted in the isolation of an oxbow canyon about one mile in length.

While rhyolite cliffs are not unique to southwest Idaho, the Owyhee River-East Fork segment, including Bald Mountain Canyon and Dukes Canyon are the most significant examples of such geologic features in the Owyhee Canyonlands and of comparable value to those found on the Bruneau-Jarbidge River system. The great abundance and size of the rhyolite formations in the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The oxbow canyon of "The Tules" is a rare geologic formation in the desert environments of the western United States.
Conclusion:

The geologic features of the Owyhee River-East Fork canyons and the tributary canyons of Bald Mountain Creek and Dukes Creek contribute significantly to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

The geologic formations of Piute Creek, Juniper Creek, and Porcupine Creek are not of sufficient size or uniqueness to contribute to the Owyhee Canyonlands geologic value. The geologic values of these three stream corridors are not outstandingly remarkable.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified nine species of fish in the Owyhee River-East Fork segment, including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpin, northern squawfish, largescale sucker, and redband trout. More recent information indicates a sizeable population of smallmouth bass now occupies the waters of the Owyhee River and East Fork up to at least Crutcher Crossing. This population has been moving upstream from Oregon. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Owyhee River-East Fork segment is presently judged to be in unsatisfactory (fair to poor) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Only in the Lambert Gorge, and one other isolated stretch of the East Fork, is fisheries habitat judged to be in satisfactory (good) condition. Efforts are underway on tributary streams such as Deep Creek (S4a, b, and c), Nickel Creek (S7a), Red Canyon Creek (S5a), and Battle Creek (Bruneau RMP) to improve habitat conditions through changes in grazing practices. Such efforts may improve summer flow levels, reduce siltation, and decrease temperatures. But the expected degree of change in these factors coupled with an inability to notably alter the availability of cover will not make a substantial change in the present overall condition of fisheries habitat along the East Fork or main stem Owyhee River. Water quality improvements could lead to isolated pockets of habitat sufficiently good enough to produce large (15' plus) trout in good numbers. However, the migration (seasonal) of smallmouth bass into the upper Owyhee River system over the past decade suggests that conditions may favor the development of a significant warm water fishery resource within the Owyhee River-East Fork segment. There is competition for food and space between smallmouth bass and trout, and current habitat conditions (mainly water quality) favor smallmouth bass.

The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It appears from a cold water fisheries perspective that this situation may not be achievable on the Owyhee River-East Fork segment as a whole. However, improving conditions on the Owyhee River-East Fork, even to a small degree, could allow a smallmouth bass populations (warm water fishery) to prosper: a unique situation for resource area streams. As such, there is the potential for an outstandingly remarkable warm water fishery.

The tributary streams of Bald Mountain Canyon Creek, Dukes Creek, Porcupine Creek, Piute Creek, and Juniper Creek have no opportunity for other than a minimal fisheries resource because of their intermittent nature.

Conclusion:

The Owyhee River-East Fork segment and its tributary streams of Bald Mountain Canyon Creek, Dukes Creek, Porcupine Creek, Piute Creek, and Juniper Creek do not presently have outstandingly remarkable fisheries values. However, some improvement in fisheries habitat could result in the development of an outstandingly remarkable warm water fishery on the Owyhee River-East Fork.

5. Wildlife Values

The Owyhee River-East Fork canyons provide upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, California bighorn sheep, and possibly the Preble's shrew.

The waters along the entire length of the Owyhee River-East Fork are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). Otter sightings are commonplace on float trips, particularly at lower flows. The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. There are a small number of bald eagles (a federally listed endangered species) which occasionally winter along the canyon walls of the upper Owyhee

River system. These cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) inhabit the entire length of the canyon system from Juniper Creek downstream into Oregon. The East Fork, in combination with Deep Creek (segment S4a) and Battle Creek (Bruneau RMP), supports the majority of the estimated 700 sheep now populating the Owyhee Canyonlands in Idaho. This number equates to about 10% of the world population. The Owyhee River-East Fork canyon system is considered a habitat of national significance.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western united states. While not containing as diverse a species composition as its tributary streams, what there is of the riparian habitat is abundant and in mostly good to excellent condition (Owyhee MSA). Species diversity is limited by the annual scouring of the river channel and shoreline by high flows. The upland habitats within the canyons, which include many topographically isolated slopes nestled amid cliffs, are in good to excellent condition (Owyhee MSA). A canyon system of such large size, and containing good to pristine habitat, possesses outstanding wildlife values. When the Owyhee River-East Fork segment is looked at in combination with the South Fork segment (S1a, b and c), the Owyhee River system in Oregon and major tributary systems, such as the North Fork Owyhee River (C5a and b) and Deep Creek (S4a,b,c, and S7a) where additional riparian and upland vegetation species diversity exists, the Owyhee Canyonlands system as a whole is a wildlife habitat area of national, if not international, significance.

The smaller tributary canyons of Bald Mountain Canyon, Dukes Canyon, Piute Canyon, Hole Up Canyon (Juniper Creek), and Red Canyon (segment S5a) contribute to the overall quality of canyonlands wildlife habitat in the Owyhee River system and are, therefore, considered to have outstanding wildlife values. Porcupine Creek, however, largely void of canyonlands habitat, is not judged to have outstanding wildlife value though it traverses plateau lands used by bighorn sheep and wintering mule deer. The Porcupine Creek corridor does not contain the dependable water, escape terrain, and/or vegetative condition of other tributary streams.

Conclusion:

The Owyhee River-East Fork Canyon, in combination with its tributary canyons of Bald Mountain Canyon, Dukes Canyon, Piute Canyon, and Hole Up Canyon (Juniper Creek), possess outstandingly remarkable wildlife values. These river segments contribute significantly to the overall value of the Owyhee Canyonlands system as a nationally if not internationally significant wildlife habitat area.

Porcupine Creek lacks outstandingly remarkable wildlife values.

6. Prehistoric Cultural Values

There are numerous prehistoric archaeological sites which have been discovered along the rimrock areas of the Owyhee River-East Fork and its tributary canyons, as well as on surrounding plateau lands. However, few sites have been located within the Owyhee Canyonlands of Idaho except in rock shelters tucked away at the bases of cliffs. It is though that what sites may have existed adjacent to the river have long since been destroyed by the frequent springtime floods and the continual realigning of the meandering river channel.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the Owyhee River-East Fork and its tributary stream corridors cannot be determined at this time.

7. Historic Cultural Values

The ruins of historic stone and wooden (log) buildings, and a water wheel representative of those constructed in the late-19th and early-20th centuries are found along the East Fork Owyhee River. All but those found at Crutcher Crossing lie on private properties. In addition, an historic CCC roadbed can be found in Piute Canyon. None of the historic sites are judged to qualify for the National Register of Historic Places (NRHP) based upon their individual significance. Taken collectively, however, they would probably qualify for inclusion on the NRHP as contributing elements of a Historic Site District centered on early ranching within the various tributaries of the Owyhee River. The sites are judged to be a significant resource which contributes to the recreational experience along the river corridor.

Conclusion:

A number of historic sites exist along the Owyhee River-East Fork which add significantly to the recreational experience of the river corridor, and may collectively qualify for inclusion on the National Register of Historic Places. However, individual sites are not judged to be of outstandingly remarkable historic value when considered in perspective to historic resources in southeast Idaho as a whole.

8. Other Similar Values

“The Tules” along the upper East Fork Owyhee River contain a unique combination of upland and wetland vegetation communities in excellent condition which are worthy of study and protection. It also contains two rare plant species: Eregeron lotus (Category 2 federal candidate species and Idaho Threatened Species List), and Hackelila ophiobia (State Sensitive

Species List). The oxbow canyon which contains "The Tules" has been proposed at a research natural area (RNA) and is undergoing ACEC evaluation in the Owyhee RMP.

Conclusion:

The Owyhee River-East Fork is considered to have outstandingly remarkable vegetation values in the area known as "The Tules." The good to pristine vegetation condition for the canyon system as a whole contributes to outstandingly remarkable vegetation values.

III. Eligibility and Classification

The entire 66.0 miles of the Owyhee River-East Fork (segment 3a) is eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, wildlife, and vegetation values. The river segment also has the potential for outstandingly remarkable fisheries values.

The 66.0 miles extending downstream from the western boundary of the Duck Valley Indian Reservation to the Oregon border should be classified as a potential wild river. Cultural modifications associated with two road crossings and a pipeline crossing, and other isolated cultural sites, are not sufficient to warrant a less restrictive classification.

The tributary streams of Bald Mountain Creek (S3b), Dukes Creek (S3g), Piute Creek (S3c), and Juniper Creek (S3f), which total 12.0 miles, are also eligible for further consideration as congressionally designated rivers because of outstandingly remarkable values as listed below:

Dukes Creek, 3.0 miles: scenic, recreational, geologic, and wildlife values.

Bald Mountain Creek, 3.0 miles: scenic, recreational, geologic, and wildlife values.

Piute Creek, 3.0 miles: scenic, recreational, and wildlife values.

Juniper Creek, 3.0 miles: scenic, recreational, and wildlife values.

Each of these river segments from their confluence with the Owyhee River-East Fork segment upstream for a distance of three miles should be classified and managed as wild rivers. These segments are void of or have minimal cultural modifications.

The .75 miles of Porcupine Creek are not eligible for further consideration as a congressionally designated river segment because of a lack of outstandingly remarkable values.

Classification Considerations for the Owyhee RMP:

The 66.0 miles of the Owyhee River-East Fork segment have already been studied by the National Park Service (NPS). The 1979 Owyhee River Wild and Scenic River Study Final Report - Environmental Statement recommends that the entire segment should be designated as a wild river. The BLM's eligibility and classification determination for the Owyhee RMP supports the NPS suitable recommendation. The Owyhee RMP should support the original NPS recommendation. However, some consideration should be given in the RMP relating to resource conflicts associated with the continued operation and possible increased size of the El Paso Gas Pipeline right-of-way at Garat Crossing.

Deep - Nickel Creek
Segments S4a, S4b, S4c, and S7a

I. Physical Description

1. Location

   a. Deep Creek: Deep Creek-Mud Flat Road crossing (Deep Creek Crossing) downstream to confluence with East Fork Owyhee River.

   b. Nickel Creek: confluence with Deep Creek upstream to northern subdivision line, SW4SW4, Sec. 25, T. 10 S., R. 4 W. (private property boundary line).

2. Length - (preliminarily eligible only)

a. Deep Creek:	32.0 miles
b. Nickel Creek:	8.0 miles
Total	40.0 miles

3. Affected Non-federal Lands

Private:

Deep Creek corridor: 520 acres

T. 10 S., R. 5 W., Sec. 9, E2E2SW4, SE4SW4.
Sec. 16, NE4NW4.
Sec. 20, SE4SE4.

Sec. 21, SW4SW4.
Sec. 29, E2E2NE4.

T. 12 S., R. 3 W., Sec. 2, E2SE4NW4, W2NE4, W2E2NE4.
Sec. 11, E2SW4SE4, SE4SE4.
Sec. 13, E2NE4NE4, E2NE4.

Nickel Creek corridor: 80 acres

T. 11 S., R. 2 W. Sec 12, N2NE4.

State:

Deep Creek corridor: 340 acres

T. 10 S., R. 3 W., Sec. 16, E2SW4NW4 SW4NW4, W2,NE4, SE4NE4,
S2NE4NE4, E2W2SW4, E2SW4.

T. 11 S., R. 3 W., Sec. 36, NW4NW4, NW4SW4NW4

4. Landscape Characteristics

This river segment description includes both the upper and lower Deep Creek segments (S4a, S4b, and S4c) and Nickel Creek segment (S7a).

Deep Creek begins its free-flowing journey at the confluence of Nip and Tuck Creek and Hurry Back Creek immediately upstream of the Deep Creek - Mud Flat Road (gravel) crossing of the Deep Creek channel. On the west stream bank adjacent to the bridge is a small, undeveloped vehicle camping area subject to occasional flooding. The stream channel parallels the gravel road as it heads southwestward, though out of site of the road due to a low bedrock ridgeline. As the stream approaches its confluence with Current Creek the topography opens out into a small, privately owned meadowland area.

Just below the Current Creek confluence (2.5 miles from the Deep Creek Crossing), Deep Creek has gouged a deep (over 400 feet), narrow canyon opening into the northern face of the Owyhee Upland's plateau lands. The stream remains entrenched in this upper canyon for nearly 13 miles before flowing out onto the face of a gently rolling plateau landscape before once again submerging into the lower canyon amid a vast expanse of sagebrush desert.

At the northern edge of the Owyhee Uplands plateau, exposed rhyolite bedrock has been eroded into a myriad of rock formations blanketed with gnarled juniper. The juniper have spilled over into the upper canyon to form a tapestry of juniper over a multitude of rock spires that crown the tips of vertical rock monoliths framing the course of Deep Creek. At the base of the cliffs, small talus slopes nestle between the bedrock and the stream's free-flowing perennial waters. Juniper joins the riparian plant community of willow, chokecherry, dogwood, alder, rose, currant, sedges and grasses. By mile-4 (into the upper canyon), the rhyolite cliffs have been replaced by a nearly continuous vertical rimrock of blocky fractured basalt peppered with juniper. Many of the riparian plant species will disappear from the stream channel by the time the creek has converged with Pole Creek and the open sagebrush desert expands away from the canyon's basalt rimrock. Only grasses and some willow will follow the stream's course through the rolling hill region to the lower canyon.

The lower segment of Deep Creek carves an extremely meandering, vertical-walled, 10.5-mile long canyon through a hilly plateau landscape on its southerly journey to the East Fork Owyhee River. This lower canyon landscape is characterized by monolithic cliffs of fracture rock rising hundreds of feet from the river channel. Near the base of the cliffs water sometimes seeps from the fractures to nourish small, lush, clinging plant communities. The sheer walls reaching to heights of over 600 feet occasionally give way to steep slopes covered with a mosaic of rock rubble and sagebrush-grassland communities. Because of the scouring action of high spring flows, shrubby riparian vegetation characteristic of the upper canyon is limited. Riparian areas consists predominately of grasses, sedges, and some willow.

Nickel Creek joins Deep Creek in its upper canyon area. The free-flowing course of Nickel Creek is confined in a shallow (100-foot deep), narrow, vertical-walled, meandering gorge as it flows due south through a highly convoluted rhyolite rock outcrop country from the Boni Ranch properties. The rhyolite outcrop country surrounding the stream is blanketed by juniper woodlands predominately of mature and old-growth age classes. Ancient juniper in the rock escarpments of the streams gorge have been gnarled by centuries of wind and snow. Younger juniper spread out across shallow-soiled perennial grassland sites to produce varying densities of woodland canopy. Within much of the stream's narrow canyon, lush riparian vegetation extends from one vertical wall to the other.

At Nickel Creek's confluence with Thomas Creek the adjacent basaltic mantles of Boni and Castro Tables have eroded into steep talus slopes to form a V-shaped canyon of about 250 feet in depth that is framed by a nearly continuous vertical rimrock cliff peppered with juniper. Nickel Creek remains in this canyon until it joins with upper Deep Creek Canyon. Within the basaltic rubble canyon area, juniper becomes less prominent as sagebrush-grasslands prevail. Riparian vegetation also becomes less dense along the stream's edge.

5. Cultural Modifications

The Deep Creek segment begins at the concrete/steel bridge at the Deep Creek-Mud Flat Road. Along the upper reaches of the Deep Creek corridor can be found private meadowlands and associated small irrigation ditches and barbed wire fences before the creek enters into the upper canyon. From the upper canyon's mouth to about one mile below the confluence of Pole Creek (from east in Bruneau Resource Area) is a scattering of fences and the ruins of a historic stone building. As the creek leaves the upper canyon to flow through a rolling plateau landscape, two pockets of private properties used as rangelands have a number of fences which parallel and/or cross the stream channel. At least four fences cross the channel. The southern properties are crossed by a primitive dirt road. The low-water crossing of the creek (no bridge) is known as Brace Crossing. In the northern properties a primitive dirt road parallels Castle Creek from the Castro Ranch site (outside the river corridor) until it deadends at the west bank of Deep Creek. Two barbed wire fences which across BLM lands approach the stream corridor from the southwest before it enters the lower canyon; however, these fences don't reach to the river. Within the lower canyon there are no cultural modifications except an old pack trail crossing of the creek in the White Cow Basin area. The trail ford area is known as Spencer's Camp.

Within the Nickel Creek corridor, cultural modifications occur in the lower canyon from Nickel Creek Pocket to the confluence with Deep Creek. A primitive dirt road crosses Nickel Creek within the Pocket in association with a barbed wire fence. About .75 miles above the Deep Creek confluence two fences approach each other down the slopes of the canyon to form a livestock grazing watergap; one fence crosses the stream. No known developments occur in the upper reaches of Nickel Creek except for a short fence extending into the stream corridor from the west less than .25 miles from the northern boundary of the stream segment. This fence is an extension of private property fences (Boni Ranch) to the north. The fence is not known to reach to the creek.

6. Existing Land Management Designations

The upper canyon of Deep Creek, stretching from the confluence of Cow Valley Creek to Pole Creek, lies within the Upper Deep Creek Wilderness Study Area (WSA).

The lower canyon from approximately 1.5 miles upstream of the Dickshooter Creek confluence (from east within Bruneau Resource Area) to Deep Creek's confluence with the East Fork Owyhee River lies within the Deep Creek-Owyhee River WSA. Contained within this WSA designation is also the Owyhee River Area of Critical Environmental Concern (ACEC). The ACEC was established for the protection of bighorn sheep habitat.

The entire Deep Creek-Nickel Creek stream corridor is contained in the Deep Creek Special Recreation Management Area identified by the Owyhee MFP.

The uppermost reaches of Deep Creek, from the Deep Creek Crossing to the mouth of the upper canyon, lies within the Owyhee Uplands National Back Country Byway corridor.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS and Bruneau Grazing EIS identified the lower Deep Creek Canyon as having Class A scenic quality. These same assessments found the landscape surrounding upper Deep Creek and Nickel Creek as having Class B scenic quality.

The EIS visual assessments of lower Deep Creek Canyon and the southern portions of the upper canyon, including Nickel Creek Canyon, were reaffirmed during the wilderness inventory process (see Wilderness Scenic Quality Inventory and Evaluation Forms). The EIS visual assessment for the rolling plateau country between the canyons appears to be warranted. The northern portions of the upper canyon were, however, assessed as Class A scenic quality during the wilderness inventory process rather than Class B as during the Grazing EIS process. This discrepancy is likely due to the fact that the EIS process assessed large landform regions rather than individual landscapes. The Class A scenic quality assessment from the wilderness inventory will be used for determining scenic qualities in this river study.

The scenic landscapes (Class A) of the upper and lower Deep Creek canyons are, in part, dominated by a mixture of high, vertical lines and forms of coarse-textured, brown to blackish eroded cliffs, often glazed with yellow to light green microflora. Intertwined with the vertical features are diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities and/or dark green juniper, as well as either medium-textured, reddish colored rhyolite rubble fields or coarse-textured, blackish basalt rubble fields. Medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of fast moving brownish, silt laden water with some whitewater rapids and boulders. During the summer months, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create an exceptionally scenic landscape. Contributing significantly to the quality of the landscape in the lower canyon is the interchange of vertical cliffs and talus slopes as the creek follows an extremely meandering course. From a scarcity standpoint, the upper Deep Creek Canyon landscape of juniper and basaltic rubble is unique to only a few miles of river and stream segments in the Owyhee Canyonlands system. Other segments include the lower North Fork Owyhee River (segment C5a). The juniper/rhyolite association of the upper canyon and the sagebrush/rhyolite associate of the lower canyon is widespread over southwest Idaho. However, the Deep Creek associations are among the best representations of the rhyolite canyon landscape in the geographical area, second to only the main Owyhee River-East/South Fork Owyhee River Canyon systems and the comparable canyon systems of the Bruneau-Jarbidge River.

Conclusion:

Much of Deep Creek offers a landscape of diverse landforms, vegetation, and water that possesses scenic qualities of outstandingly remarkable value. Portions of Deep Creek represent some of the best rhyolite canyon scenic areas in southwest Idaho.

The scenic quality of Nickel Creek is of significant value. However, it is not considered to be outstandingly remarkable.

2. Recreational Values

The upper Deep Creek Canyon and Nickel Creek Canyon complex, and lower Deep Creek Canyon, offer outstanding low-water backpacking opportunities during the summer months. Current recreational use is low, however, the canyons' scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract backpackers from the Pacific Northwest (PNW) region once its opportunities are more widely known. Louse Canyon of the West Little Owyhee River (canyon of similar quality), which enters the Owyhee River in Oregon, presently attracts Pacific Northwest (PNW) backpackers on a regular basis. The Deep Creek-Nickel Creek canyon system provides diversity in backpacking opportunities in the Owyhee Canyonlands system by providing varying landscapes to enjoy.

Deep Creek has already become well known in the Pacific Northwest, as well as in Utah, Colorado, and California, for its kayaking and open canoeing opportunities during a brief period of time in early spring (April and early May) when flows reach into the hundreds of cubic feet per second from snowmelt. The creek has a gradient and channel structure which produces a Class II whitewater run ideally suitable for open canoes. Those who have had the opportunity to run the stream consider it one of the best wildlands or primitive open canoe trips in the United States because of its solitude, scenic qualities, wildlife viewing, and length of trip possible. Boaters must continue down the East Fork Owyhee River once they have left Deep Creek. The use of Deep Creek offers diversity to the length and type of boating opportunities found in the Owyhee Canyonlands system.

Nickel Creek is not a boatable stream.

Conclusion:

Kayaking, canoeing, and backpacking opportunities along the entire length of Deep Creek are judged to be outstandingly remarkable. These values are enhanced when considered in context of the entire Owyhee Canyonlands system. Nickel Creek also contributes outstandingly remarkable backpacking opportunities.

3. Geologic Values

Like all of the Owyhee Canyonlands, the Deep Creek-Nickel Creek canyon complex has geologic formations predominately of volcanic origin (Miocene). The canyons expose 200 to 600 vertical feet of rhyolitic welded tufts and tuffaceous sediments. In upper Deep Creek and Nickel Creek canyons, the rhyolites are topped with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured pinnacle shapes known as "hoodoos" or immense monolithic cliffs from the rhyolite and basalt. If topped by basalt, the rhyolite formations are nestled in a blanket of rubble slopes.

The geologic features carved by Deep Creek and Nickel Creek are significant features of their canyons, but they are not unique to southwest Idaho. Examples of similar geologic features are found throughout the Owyhee Canyonlands system and the Bruneau-Jarbidge River system. Though not unique to southwest Idaho, the presence of such geologic formations in such great abundance and size throughout the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The entire Deep Creek-Nickel Creek canyon complex is considered an integral part of the overall geologic picture. The lower canyon of Deep Creek has some of the largest rhyolite cliff formations in the Owyhee Canyonlands of southwest Idaho, second only to those on the main Owyhee River in the South Fork-East Fork Owyhee River confluence area.

Conclusion:

The geologic features of the Deep Creek-Nickel Creek canyon complex contribute to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified nine species of fish in the Deep Creek-Nickel Creek complex, including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpin, northern squawfish, largescale sucker, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Deep Creek-Nickel Creek drainage system is judged to be presently in unsatisfactory (poor to fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway along Deep Creek and Nickel Creek and other headwater streams to improve habitat conditions through changes in grazing practices. The headwater streams include the streams draining the east slopes of Juniper Mountain and the central juniper rock outcrop country (Combination Ridge area) of the resource area.

Most streams in southwest Idaho suffer from similar fisheries habitat degradation to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, many streams have the potential to achieve outstanding fisheries values. The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that much of the length of Deep Creek, and portions of Nickel Creek between its confluence with Thomas Creek and Deep Creek, have potential as outstanding fisheries given anticipated improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors. Above Thomas Creek, Nickel Creek would not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

The Deep Creek-Nickel Creek complex presently does not have outstanding remarkable fisheries values. However, with anticipated improvements in habitat conditions and subsequent increases in fish populations and sizes, portions of the stream complex have the potential for outstandingly remarkable fisheries values.

5. Wildlife Values

The Deep Creek-Nickel Creek canyons provide upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, California bighorn sheep, and possibly Preble's shrew. Habitat conditions are currently rated as unsatisfactory (fair to poor); see Owyhee MSA.

The waters along the entire length of Deep Creek, and those of Nickel Creek downstream of Thomas Creek, are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). Flows on the upper reaches of Nickel Creek limit river otter use. The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. There are a small number of bald eagles (a federally listed endangered species) that occasionally winter along the canyon walls of the upper Owyhee River system and its major tributaries. These cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) inhabit the deep, lower canyon of Deep Creek in large numbers. Deep Creek has the greatest density of animals in the Owyhee Canyonlands. The Owyhee Canyonlands support about 700 animals: 10% of the world population. The lower Deep Creek Canyon is considered a habitat of national significance.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). This is also typical of the lower Deep Creek. This is do primarily from high water scouring in the springtime. Upper Deep Creek Canyon and Nickel Creek Canyon contain a much greater diversity of riparian and upland vegetation species than the main Owyhee River; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The upper Deep Creek Canyon and Nickel Creek Canyon, along with several other segments, represent the biggest and best of these habitats and, therefore, possess outstanding wildlife values.

Conclusion:

The Deep Creek-Nickel Creek complex possesses outstandingly remarkable wildlife values because of the regional and national significance of its wildlife habitats.

6. Prehistoric Cultural Values

A cultural resource inventory of the Deep Creek-Nickel Creek complex has not been completed. However, a number of archaeological sites have already been identified in the area. The Pole Creek Historic District, lying just east of Deep Creek on the tributary streams of Pole and Camas Creek (Bruneau Resource Area), has been designated as eligible for inclusion in the National Register of Historic Places because of its significant concentration of prehistoric cultural sites. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridors of Deep and Nickel Creek may contain significant cultural resource values. Field work to identify sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the Deep Creek-Nickel Creek segment cannot be determined at this time.

7. Historic Cultural Values

The ruins of a historic stone building representative of those constructed in the late-19th and early-20th centuries is found along the west side of Deep Creek about 1.5 miles upstream from the Nickel Creek confluence. The site is typical of those found on both public and private lands throughout southwest Idaho. The site is not judged to be eligible for inclusion on the National Register of Historic Places (NRHP) based upon its individual significance. However, when viewed collectively with other sites scattered throughout the Owyhee Canyonlands, it would probably qualify for inclusion on the NRHP as a contributing element of a Historic Site District centered around early ranching within the various tributaries of the Owyhee River.

Conclusion:

The Deep Creek-Nickel Creek canyon complex does not contain any individual historic sites of outstandingly remarkable value.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Deep Creek-Nickel Creek segment.

III. Eligibility and Classification

The entire 32.0 mile length of Deep Creek (segments 4a, 4b, and 4c) is eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, and wildlife values. The river segment also has the potential for outstandingly remarkable fisheries values.

Deep Creek's 32.0 miles of free-flowing waters extending downstream from the Deep Creek Crossing bridge to the confluence with the East Fork Owyhee River should be classified as a potential wild river. Cultural modifications associated with the southern road crossing and rangeland developments are not sufficient to warrant less than a wild river classification on all affected lands. Lands containing the northern hay meadows and associated road and fencing, etc., are also not sufficiently developed to warrant less than a wild classification.

The 8.0 miles of Nickel Creek (segment S7a) are eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, and wildlife values. The river segment also has the potential for outstandingly remarkable fisheries values.

Nickel Creek's 8.0 miles of free-flowing waters extending downstream from the Boni Ranch's southern property line to the Deep Creek confluence should be classified as a potential wild river. Cultural modifications associated with roads and fences are not sufficient to warrant a less restrictive classification.

Classification Considerations for the Owyhee RMP:

The upper 2.5 miles of Deep Creek, which lie within the Owyhee Uplands National Back Country Byway corridor, could be managed for VRM Class II to allow for potential recreation site development options as proposed in the Owyhee RMP. Such management is not consistent with a wild river classification. The suitable recommendation would have to call for classifying the 2.5 miles as a scenic river corridor. This suitability classification would be consistent with the scenic classification given to lower Current Creek, which also lies within the Byway corridor.

Red Canyon - Petes Creek
Segments S5a and S6a

I. Physical Description

1. Location

a. Red Canyon Creek: Crossing of the dirt road downstream to the confluence with the East Fork Owyhee River.

b. Petes Creek: Crossing of the dirt road downstream to confluence with Red Canyon Creek.

2. Length - (preliminarily eligible only)

a. Red Canyon Creek:	4.0 miles
b. Petes Creek:	3.0 miles
Total	7.0 miles

3. Affected Non-federal Lands: None

4. Landscape Characteristics

This river segment description includes both the lower reaches of Red Canyon Creek and Petes Creek. The two stream each begin their journey through this segment from the east-west dirt road that travels from Red Basin to Bull Basin on the south side of Juniper Mountain. Red Canyon Creek cuts a very narrow (less than one-quarter mile wide), vertical-walled canyon through a hilly plateau landscape, southward to the East Fork Owyhee River. The sheer rhyolite canyon walls rise directly from, or within a few feet, of the stream channel along nearly the entire segment. The canyon walls are characterized by monolithic cliffs of fracture rhyolite rock rising to a height of 200 feet. Near the base of the cliffs water sometimes seeps from the fractures to nourish small, lush, clinging plant communities. Nestled between the water course and the cliffs, wherever vegetation can find sanctuary from spring runoff, can be found an extremely lush riparian community of willow, chokecherry, dogwood, alder, rose, currant, sedges and grasses. In the few areas where talus slopes form between the stream and the canyon's rim can be found sagebrush-grassland communities sprinkled with an occasional juniper tree. The hilly topography surrounding the canyon permits frequent views of the plateau sagebrush-grassland communities.

Petes Creek enters the segment contained within a shallow draw. This draw quickly deepens to a narrow, vertical-walled canyon identical in size and landscape character to that of Red Canyon Creek, except that the stream course is somewhat more meandering. The two streams have historically been identified as perennial streams, at least in their lower reaches. Surface water will remain in lower Red Canyon Creek, below the Petes Creek confluence, even in dryer years. Surface water can become scarce in both stream channels above the confluence by late summer.

5. Cultural Modifications

Road crossings mark the beginning of this stream segment. There is also a livestock fence which traverses the bottom of Red Canyon Creek for less than 0.1 miles at its road crossing. At several locations the surrounding hilly plateau topography allows the viewing of some steel posted associated with fencelines which run along the rimrocks of upper Red Canyon Creek. About one mile below the streams' confluence, a jeep trail ends at the east rim of Red Canyon. From this jeep trail, a pack trail reaches into the canyon bottom to an area known as "The Garden." The pack trail climbs out of the canyon and continues westward over the plateau toward Crutcher Crossing (see segment S3a).

6. Existing Land Management Designations

All of Red Canyon Creek and most of Petes Creek lie within the Deep Creek-Owyhee River Wilderness Study Area (WSA). Since the establishment of the WSA boundaries a land exchange between the BLM and the State of Idaho has transferred ownership of some lands (640 acres) affecting Petes Creek to the BLM. This transfer enabled the BLM to extend its wilderness recommendation for the WSA to the road crossing on Petes Creek. These additions to wilderness recommendations are referred to as Section 202 Study Lands (a reference to Section 202 of FLPMA).

The lower reaches of Red Canyon Creek, from just below "The Garden," are also contained within the Owyhee River Area of Critical Environmental Concern (ACEC). In addition, these lands are overlapped by the Owyhee Canyonlands Special Recreation Management Area (SRMA).

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified both Red Canyon Creek and Petes Creek as having Class A scenic quality. This assessment was reaffirmed during the Owyhee wilderness inventory process (see Wilderness Scenic Quality and Evaluation Form).

The scenic landscapes of Red Canyon Creek and Petes Creek are dominated by high, vertical lines and forms of coarse-textured, brownish, eroded cliffs, often glazed with yellow to light green microflora. Occasionally intertwined with the vertical features at lower elevations within the canyon, and frequently setting atop the canyon walls, are diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities and a few dark green juniper, as well as medium-textured, reddish colored rhyolite rubble fields. Medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of fast moving brownish, silt laden water with some whitewater rapids and boulders. During the summer months, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create an exceptionally scenic landscape. Contributing significantly to the quality of the landscape is the interchange of vertical cliffs and overriding talus slopes as the creek follows a meandering course through the hilly plateau/ canyon landscape. From a scarcity standpoint, the Red Canyon-Petes Creek landscape with its rhyolite canyon/riparian association is not unique to the Owyhee Canyonlands system. Other segments include the North Fork Owyhee River (segments C5a and 5b), Deep-Nickel Creek (segments S4a, b, and c; S7b), and Current-Corral Creek (segment S8a). The rhyolite canyon/ riparian association is widespread over southwest Idaho. However, the Red Canyon-Petes Creek associations are among the best representations of the rhyolite canyon/riparian landscape in the geographical area.

Conclusion:

Red Canyon and Petes Creek canyons offer a landscape of diverse landforms, vegetation, and water that possesses scenic qualities of outstandingly remarkable value. These creeks represent some of the best rhyolite canyon/riparian scenic areas in southwest Idaho.

2. Recreational Values

The Red Canyon-Petes Creek canyon complex offers backpacking opportunities. Current recreational, however, is low; limited primarily to day-hiking activities associated with river trips on the East Fork Owyhee River. The canyon system is a side-canyon attraction experienced by a large percentage of river visitors, if for no other reason than as a lunch stop at its confluence with the East Fork. Despite the canyons' scenic qualities and opportunities for hiking, wildlife viewing, photography, and fishing, they are not are expected to attract visitors from the Pacific Northwest (PNW) region except those participating in river trips, or some may backpack the canyons as part of an overall East Fork backpack trip. The Red Canyon-Petes Creek canyon system itself is too small to attract visitors from the Pacific Northwest (PNW). Louse Canyon of the West Little Owyhee River (canyon of similar quality), which enters the Owyhee River in Oregon, presently attracts Pacific Northwest (PNW) backpackers on a regular basis. This canyon system is of considerably greater length.

Red Canyon Creek and Petes Creek are not boatable streams.

Conclusion:

The Red Canyon-Petes Creek segment offers outstandingly remarkable recreational values when considered in terms of its use as a side-canyon experience associated with river running activities on the East Fork Owyhee River. The day-hiking opportunities afforded by the Red Canyon-Petes Creek canyon system greatly enhance recreational opportunities on the Owyhee Canyonlands system as a whole.

3. Geologic Values

Like all of the Owyhee Canyonlands, the Red Canyon-Petes Creek canyon complex has geologic formations predominately of volcanic origin (Miocene). The canyons expose 200 vertical feet of rhyolitic welded tufts and tuffaceous sediments. Ongoing weathering and erosion have carved a myriad of sculptured columnar shapes, including some "hoodoos," from monolithic cliffs.

The geologic features carved by Red Canyon and Petes Creek are significant features of their canyons, but these features are not unique to southwest Idaho. Examples of similar geologic features are found throughout the Owyhee Canyonlands system and the Bruneau-Jarbidge River system. Though not unique to southwest Idaho, the presence of such geologic formations in such great abundance and size throughout the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The entire Red Canyon-Petes Creek canyon complex is considered an integral part of the overall geologic picture.

Conclusion:

The geologic features of the Red Canyon-Petes Creek canyon complex contribute to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified two species of fish in the Red Canyon-Petes Creek complex, including sculpin and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Red Canyon-Petes Creek segment is judged to be presently in satisfactory (fair to good) condition overall. Stream siltation, adequate summer flows (below Red Canyon-Petes Creek confluence), cooler water temperatures, and the presence of cover contribute to fishery condition (Owyhee MSA). Efforts are underway along upper Red Canyon Creek and Petes Creek, and other headwater streams, to further improve habitat conditions through changes in grazing practices.

Most streams in southwest Idaho suffer from lesser quality fisheries habitats to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, which streams have the potential to have outstanding fisheries values? The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that Red Canyon Creek and Petes Creek, though presently superior to many stream in the resource area, would not be an outstanding fisheries compared to the "average" stream if other streams in the resource area are given an opportunity to make improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors. The Red Canyon-Petes Creek system would then not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

The Red Canyon-Petes Creek complex presently has significant fisheries values. However, with anticipated improvements in habitat conditions and subsequent increases in fish populations and sizes for resource area streams as a whole, the stream complex would not rate as one with an outstandingly remarkable fisheries value.

5. Wildlife Values

The Red Canyon-Petes Creek canyon complex provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, California bighorn sheep, and possibly the Preble's shrew. Habitat conditions are currently rated as unsatisfactory (fair); see Owyhee MSA.

The waters of Red Canyon Creek below the confluence with Petes Creek are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). Flows on the upper reaches of Red Canyon Creek and on Petes Creek limit river otter use. The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. Lower Red Canyon, like the upper Owyhee Canyonlands system as a whole, provides habitat for an occasional wintering bald eagle (a federally listed endangered species). The cliffs of Red Canyon are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) inhabit the canyons of Red Canyon Creek and Petes Creek. The Owyhee Canyonlands system as a whole supports about 700 animals: 10% of the world population. Any canyon system contributing to bighorn sheep habitat along the Owyhee River is considered a habitat of national significance.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). The Red Canyon-Petes Creek complex contains a much greater diversity of riparian and upland vegetation species than the main Owyhee River; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The Red Canyon-Petes Creek canyon system, along with several other segments, represent the best of these habitats and, therefore, possesses outstanding wildlife values.

Conclusion:

The Red Canyon-Petes Creek canyon complex possesses outstandingly remarkable wildlife values because of the regional and national significance of its wildlife habitats, and the presence of sensitive and possibly Category 2 federal candidate species listed for protection under the Endangered Species Act.

6. Prehistoric Cultural Values

A cultural resource inventory of the Red Canyon-Petes Creek complex has not been completed. However, a number of archaeological sites have been identified in the Owyhee Canyonlands area, particularly on the rimrocks of canyons. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridors of Red Canyon Creek and Petes Creek may contain significant cultural resource values. Field work to identify sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values cannot be determined at this time.

7. Historic Cultural Values

There are no known historic cultural sites within the Red Canyon-Petes Creek corridor.

Conclusion:

The Red Canyon-Petes Creek canyon complex is not known to contain any historic resources of outstandingly remarkable value.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Red Canyon-Petes Creek segment.

III. Eligibility and Classification

The entire 7.0 mile length of the Red Canyon-Petes Creek segment is eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, and wildlife values.

The 3.0 miles of Petes Creek and the 4.0 miles of Red Canyon Creek that run free-flowing from the Red Basin - Bull Basin road downstream to the confluence with the East Fork Owyhee River should be classified as a potential wild river. Cultural modifications associated with the road crossings and rangeland fences are not sufficient to warrant less than a wild river classification.

Classification Considerations for the Owyhee RMP:

None.

Current - Corral Creel
Segment S8a

I. Physical Description

1. Location

a. Current Creek: one mile below headwaters to confluence with Deep Creek.

b. Corral Creek: headwaters to confluence with Current Creek.

2. Length (preliminary eligible only)

a. Current Creek:	9.0 miles
b. Corral Creek:	3.0 miles
Total:	12.0 miles

3. Affected Non-federal Lands

Private:

Current Creek corridor: 180 acres

T.10 S., R. 3 W., Sec. 8, N2SE4.
Sec. 9, W2SW4, W2NE4SW4.

4. Landscape Characteristics

Current Creek and Corral Creek drain a large, extremely convoluted rhyolite outcrop country in the middle of the Owyhee Resource Area. Current Creek flows nine (9) miles south to join with Deep Creek (segment S4a, 4b, and 4c) on its journey to the East Fork Owyhee River (segment S3a). The creek meanders through an extremely narrow, vertical-walled canyon reaching depths of over 300 feet. The canyon begins with the convergence of numerous draws which drain snowmelt from a rugged landscape containing a multitude of diversely eroded rock outcrop formations. Intermingled shallow soils support a thin canopy of gnarled juniper. As the creek cuts into the fractured rhyolite, vertical walls loom over the channel. The upper cliffs are highly eroded into a myriad of diversely shaped spires which march upslope to merge with surrounding outcrop formations. Junipers pour into the soil areas between the spires. Some juniper are content to grow directly from fractures in the bedrock. At the base of the cliffs, water seeps from fractures to nourish clinging, lush, plant communities. Larger seeps or springs help retain flows in the stream channel during summer months; producing a ribbon of water and riparian vegetation including willow, chokecherry, aspen, dogwood, alder, rose, current, sedges, and grasses.

About 4 miles from its confluence with Deep Creek, a mantle of bedrock forming Nickel Table caps the rhyolite formations on the west side of the canyon with a nearly continuous wall of blocky fractured basalt rimrock and associated rubble slopes. Within another 1.5 miles, below the confluence of the nearly identical rhyolite canyon of Corral Creek, the topography surrounding Current Creek begin to open up and the vertical relief disappears to be replaced by a broad, hilly basin area. The basin is flanked on the west by the basaltic rimrocks and rubble slopes that form Nickel Table. Through this hilly basin of scattered juniper and sagebrush-grasslands passes the Owyhee Uplands National Back Country Byway. The Byway crosses Current Creek about 1.5 miles before its confluence with Deep Creek. Just southeast of the confluence, the rugged rhyolite topography returns in the form of Slack Mountain.

5. Cultural Modifications

From the Byway crossing downstream to Deep Creek, Current Creek is paralleled on the north by a primitive dirt road. The road extends nearly to Deep Creek. It ends in the hay meadows on the private properties that surround the Current - Deep Creek confluence. South of Current Creek, at the edge of the meadow lands, is a historic wood cabin and corral site. Associated with the meadowland development are the customary barbed wire fences.

To the north of the Byway crossing, the primitive dirt road leading to Indian Battleground atop Nickel Table parallels Current Creek on the west at a distance of about one-quarter to one-half mile. The road is not visible from the stream channel. The only other cultural modifications north of the Byway are some livestock management fences that traverse the rimrocks of Current Creek and cross Corral Creek (no fence in canyon bottom) near the creeks' point of confluence.

6. Existing Land Management Designations

All but the lower 1.5 miles of this stream segment flows through the North Fork Owyhee Backcountry Special Recreation Management Area (SRMA). Contained within the SRMA designation is the North Fork Owyhee River Wilderness Study Area (WSA).

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality inventory completed for the Owyhee Grazing EIS identified the rhyolite rock outcrop country of Current and Corral Creek as having Class A scenic quality. This assessment was reaffirmed during the wilderness inventory process (see Wilderness Scenic Quality Inventory and Evaluation Form).

The rhyolite canyon landscapes of Current and Corral Creek landscapes are dominated by vertical lines and forms of course-textured, brownish, diversely eroded cliffs, often glazed with yellow to light green microflora. Intermingled subordinate triangular forms and diagonal lines associated with talus slopes frame medium-textured, yellow and subdued green sagebrush-bunchgrass communities and dark green juniper which all have a scattering of indistinctive lines. Medium-textured, rich green riparian vegetation follows the meandering line of sparkling pools and slow to fast moving water tinted with green and brown channel colors. Blue sky and a blend of forms, colors, and lines from surrounding cliffs and slopes reflect from the pools. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create exceptionally scenic landscapes. From a scarcity standpoint, the rhyolite rock outcrop country with its numerous narrow, vertical relief stream corridors is widespread over the central portion of the Owyhee Resource Area. The canyons of Current and Corral Creek, as well as those of the upper North Fork Owyhee River (segment C5b) found within the North Fork Owyhee Backcountry SRMA, are among the best representations of this scenic rhyolite rock outcrop geographic area.

The stream corridor within the basin area near the Byway lacks the dominant vertical landforms necessary for Class A scenic quality. The low rolling hills of the basin are periodically cut to form small cliffs adjacent to the stream channel in an otherwise horizontal landscape of long, gently curved lines and elongated, flattened landforms. The forms are covered with a light green to yellowish (depending on season) vegetative mosaic of medium-textured sagebrush-grassland communities peppered with dark green juniper trees. In the distance, the basin landscape is framed by the vertical relief of Nickel Table and Slack Mountain. These landforms are covered with a denser canopy of dark green juniper and stands of mountain mahogany, other large shrubs, and quaking aspen. Aspen stands provide rich yellows and reds to the fall landscape. The rhyolite and basalt geology gives the customary rich brown to blackish colors and coarse textures to the landscape. The basin area was rated as having high-Class B scenic quality during the visual resource inventory.

Conclusion:

The canyons of Current and Corral Creek offer landscapes with landforms, vegetation, and water that possess scenic qualities of outstandingly remarkable value. These canyons represent some of the best rhyolite rock outcrop scenic areas in southwest Idaho. The basin area of the

Current Creek corridor offers significant scenic values, but they are not rated as outstanding.

2. Recreational Values

Current Creek and Corral Creek, like other smaller streams in the Owyhee Canyonlands system, offer outstanding low-water backpacking opportunities during the summer months. Presently recreational use is low, however, the canyons' scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract backpackers from the Pacific Northwest (PNW) region once its opportunities are more widely known. Louse Canyon of the West Little Owyhee River (canyon of similar quality but no woodlands), which enters the Owyhee River in Oregon, currently attracts Pacific Northwest (PNW) backpackers on a regular basis. The canyons of Current and Corral Creek provide diversity in backpacking opportunities in the Owyhee Canyonlands system by providing a more lush and wooded environment.

Water flows and channel characteristics make whitewater boating opportunities impractical to impossible.

Conclusion:

Backpacking opportunities in Current-Corral Creek canyon complex are judged to be outstandingly remarkable. These values are enhanced when considered in context of the entire Owyhee Canyonlands system.

3. Geologic Values

Both Current Creek and Corral Creek have geologic formations predominantly of volcanic origin (Miocene). The canyon system exposes over 300 vertical feet of rhyolitic welded tufts and tuffaceous sediments partially capped in one area with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured monolithic cliff walls from the rhyolite, including "hoodoos" or rock pinnacles.

The geologic features carved by Current and Corral Creek are typical of those found throughout the Owyhee Canyonlands complex and other drainages of southwest Idaho. The geologic features found in other segments of the Owyhee Canyonlands system and the Bruneau-Jarbidge River system are more extensive and of larger scale. Though not unique to southwest Idaho, the presence of such geologic formations in great abundance and size throughout the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The canyons of Current and Corral Creek are considered an integral part of the overall geologic picture.

Conclusion:

The geologic features of Current and Corral Creek canyon complex contribute to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified two species of fish in the Current-Corral Creek segment including sculpin and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Current Creek drainage system is judged to be presently in unsatisfactory (fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway to improve habitat conditions through changes in grazing practices at the headwaters of Current Creek and its tributary streams.

Most streams in southwest Idaho suffer from similar fisheries habitat concerns to varying degrees. Assuming the BLM is successful in improving fisheries habitat conditions throughout the resource area, which streams have the potential to outstanding fisheries values? The mere presence of redband trout in an resource area stream does not justify an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that Current Creek and its tributary stream, Corral Creek, do not have potential as an outstanding fisheries despite anticipated improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors. Even with such improvements, these streams would not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

Current Creek and Corral Creek presently do not possess outstandingly remarkable fisheries values. Anticipated improvements in habitat conditions are not expected to produce increases in fish populations and sizes that would result in outstandingly remarkable fisheries values.

5. Wildlife Values

Current Creek and its tributary stream, Corral Creek, provide upland and riparian habitats for a number of wildlife species including elk, mule deer, cougar, bobcat, beaver, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly the Preble's shrew. Habitat conditions are currently rated at unsatisfactory (fair to poor); see Owyhee MSA.

The high, well fractured and otherwise eroded cliffs of the canyon are considered outstanding habitat for cliff nesting raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). The Current-Corral Creek canyon complex contains a much greater diversity of riparian and upland vegetation species; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The Current-Corral Creek segment, along with several other segments, represents the biggest and best of these habitats and, therefore, possesses outstanding wildlife values.

Conclusion:

The Current-Corral Creek segment possesses outstandingly remarkable wildlife values because of the regional and national significance of its wildlife habitats.

6. Prehistoric Cultural Values

A cultural resource inventory of the Current-Corral Creek system has not been completed. However, a number of archaeological sites have been identified in the area. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridor of Current Creek and its tributaries may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable cultural values along the Current-Corral Creek segment cannot be determined at this time.

7. Historic Cultural Values

No known historic sites exist on public lands within the Current-Corral Creek corridor. A cabin characteristic of those built in the late-19th and early-20th centuries is located on private lands along Current Creek about one (1) mile upstream of its confluence with Deep Creek.

The cabin site is typical of many such sites found on both public and private lands throughout southwest Idaho. The site is not judged to be eligible for the National Register of Historic Places (NRHP) based upon its individual significance. However, when taken collectively with other sites scattered throughout the Owyhee Canyonlands it would probably qualify for inclusion in on the NRHP as a contributing element of a Historic Site District centered on early ranching within the various tributaries of the Owyhee River.

Conclusion:

No individual historic site of outstandingly remarkable value exist with the Current-Corral Creek segment.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Current- Corral Creek segment.

III. Eligibility and Classification

The 9.0 miles of Current Creek and the 3.0 miles of Corral Creek are eligible for further consideration as congressionally designated rivers because of outstandingly remarkable scenic, recreational, geologic, and wildlife values.

There are 9.0 miles of free-flowing rivers extending upstream of the Owyhee Uplands National Back Country Byway bridge crossing, including 7.5 miles of Current Creek and 3.0 miles of Corral Creek, which should be classified as potential wild rivers. Cultural modifications are lacking, except for some barbed wire fencing. The 1.5 miles of Current Creek below the Byway bridge crossing should be classified and a potential scenic river. Cultural modifications associated with the private properties located within about one mile of the Current-Deep Creek confluence are sufficient to warrant a less restrictive classification on the affected length of river corridor.

Classification Considerations for the Owyhee RMP:

The upper 2.5 miles of Deep Creek, from its confluence with Current Creek to the crossing of the Byway, have been classified as wild in the eligibility determination. However, the Owyhee RMP will consider recommending these 2.5 miles as suitable for scenic river designation to retain recreation development options. This suitability classification would be consistent with the eligibility classification being given to lower Current Creek. A scenic river suitability classification for lower Current Creek would be compatible with development options for private properties affecting both Deep Creek and Current Creek.

A scenic suitability classification should also be considered for the Current-Corral Creek segment upstream of the Byway crossing. The Owyhee RMP is proposing the construction of a 30-mile trail system within the North Fork Owyhee Backcountry SRMA. This trail system would cross the Current-Corral Creek canyon complex in several places. The placement of bridges across these creeks would not be consistent with a wild classification.

Lower North Fork Owyhee River
Segment C5a

I. Physical Description

1. Location: From the Oregon-Idaho border upstream to the crossing of Deep Creek-Mud Flat Road (North Fork Crossing).

2. Length (preliminary eligible only): 4.0 miles

3. Affected Non-Federal Lands: None

4. Landscape Characteristics

The lower North Fork Owyhee River flows freely southwestward through a somewhat meandering, 200 to over 500-foot deep, vertical-walled canyon about one-quarter mile in width. The river has cut through an expansive sagebrush-grassland plateau formed from a mantle of basalt to expose underlying rhyolite. The rhyolite has typically eroded into sheer monolithic cliffs which, in several locations, rise directly from the river channel. In other areas, talus slopes have settled at the base of the cliffs to define the river's shoreline. The forces of weathering and erosion have turned the rock faces into a myriad of sculptured shapes, including spires or pinnacles, which rise to meet talus slopes extending from the overlying eroded basalt mantle. Unlike the rhyolite, the basalt has weathered into blocky fractured, vertical walls which, over the centuries, have collapsed and sent large rock tumbling over the rhyolite, covering it with rubble slopes, and choking the river channel with boulders; creating long stretches of foaming whitewater during spring runoff. Soils developing from the talus slopes support sagebrush-bunchgrass communities intermixed with an overstory of scattered western juniper. Juniper is also found growing directly from fractures in the rhyolite and basaltic cliffs. In the canyon's side draws, and other more sheltered areas, junipers merge to form relatively dense stands. Along the river's shoreline, juniper is found in association with a variety of deciduous riparian zone vegetation species, including willow, chokecherry, dogwood, alder, rose, current, sedges, and grasses.

5. Cultural Modifications

The North Fork Crossing affects one-half mile of the lower North Fork Owyhee River. The crossing includes the roadbed switchbacks of the Deep Creek-Mud Flat Road and a concrete/ steel bridge, as well as the North Fork Recreation Site. The recreation site contains a gravel road accessing seven composite units (tables and grills), a toilet, and a kiosk. The site is fenced on the north, east, and south by a green-posted, barbed wire fence, including a wooden swing-away across the river at the bridge crossing. The west end of the site is not fenced. Instead, the fencing extends up into the canyon's rimrock areas to exclude livestock from the lower canyon area. These cultural modifications are not readily apparent from the river at .25 miles below the bridge, but are visible from the canyon's rimrock .5 miles below the bridge along the Deep Creek-Mud Flat Road at what is known as the Pinnacles Overlooks. Other gap fences are found in the rimrock areas of side draws but are not visible from the river. Also, a utility line crosses the canyon in the Pinnacle area. It does not have warning balls attached.

6. Existing Land Management Designations

The lower North Fork Owyhee River is contained in the North Fork Canyon Special Recreation Management Area (SRMA). The North Fork Canyon SRMA was identified in the Owyhee MFP (1981). The river canyon extends into Oregon (Vale District) where it was congressionally designated as a National Wild River under the Oregon Omnibus Rivers Bill (1988). The upper one-half mile of the canyon lies within the Owyhee Upland National Back Country Byway corridor.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the North Fork Canyon as having Class A scenic quality. This assessment was reaffirmed in July of 1991 (see Scenic Quality Inventory and Evaluation Form; Form 9400-1).

The North Fork Canyon landscape is dominated by high, vertical lines and forms of course-textured, brown to blackish diversely eroded cliffs, often glazed with yellow to light green microflora. Intermingled subordinate triangular forms and diagonal lines associated with talus slopes frame medium-textured, yellow and subdued green sagebrush-bunchgrass communities and dark green juniper, as well as course-textured basalt rubble fields. Medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of raging whitewater and boulders. During the summer months, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, color, and lines from surrounding cliffs. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create an exceptionally scenic landscape. From a scarcity standpoint, the North Fork Canyon's landscape is unique to only a few miles of river and stream segments in the Owyhee Canyonlands system. The uniqueness is due to the association of basaltic cliffs and rubble with juniper in the landscape. Other segments include the North Fork in Oregon and portions of upper Deep Creek-Nickel Creek (segments S4b and S7a respectively).

Conclusion:

The lower North Fork Owyhee River offers a unique landscape of landforms, vegetation and water that possesses scenic qualities of outstandingly remarkable value. These values are enhanced when considered in context of the entire Owyhee Canyonlands system.

2. Recreational Values

The North Fork Owyhee River, below the North Fork Crossing, is a Class V whitewater river during the months of April and early May in "good" water years. It is regionally (Pacific Northwest) recognized as a "world class" expert kayaker run. Current use levels are very low, yet the North Fork is judged to be an outstanding whitewater resource because of its challenging rapids and exceptional scenery. It provides diversity to the type of river running opportunities available in the Owyhee Canyonlands system.

The North Fork Canyon, like other smaller tributaries of the Owyhee Canyonlands system, offers outstanding low-water backpacking opportunities during the summer months. Again, current use is low; however, the North Fork's scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract backpackers from the Pacific Northwest (PNW) region once its opportunities are more widely known. Louse Canyon of the West Little Owyhee River (canyon of similar quality but no juniper woodlands), which enters the Owyhee River in Oregon, currently attracts Pacific Northwest (PNW) backpackers on a regular basis. The North Fork Canyon provides diversity in backpacking opportunities in the Owyhee Canyonlands system by providing a more bush and wooded environment.

Conclusion:

Kayaking and backpacking opportunities along the lower North Fork Owyhee River are judged to be outstandingly remarkable. These values are enhanced when considered in context of the entire Owyhee Canyonlands system.

3. Geologic Values

Like all of the Owyhee Canyonlands system, the North Fork Canyon has geologic formations predominantly of volcanic origin (Miocene). The canyon exposes up to 500 vertical feet of rhyolitic welded tufts and tuffaceous sediments, and overlying basaltic flows. Ongoing weathering and erosion have carved sculptured monolithic cliffs and pinnacle shapes known as "hoodoos" from the rhyolite nestled in the rubble slopes of basalt. As the river cuts westward, high, vertical cliffs of basalt predominate with any underlying rhyolite completely buried in rubble.

The geologic features carved by the North Fork Owyhee River are significant features of its canyon, but they are not unique to southwest Idaho. Examples of similar geologic features are found elsewhere in the Owyhee Canyonlands system and the Bruneau-Jarbidge River system of southwest Idaho. Though not unique to southwest Idaho, the presence of such geologic formations in great abundance and size throughout the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The lower North Fork is considered an integral part of the overall geologic picture of the Owyhee Canyonlands.

Conclusion:

The geologic features of the lower North Fork Canyon contribute to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified nine species of fish in the lower North Fork Owyhee River, including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpin, northern squawfish, largescale sucker, and redband trout. In recent years (1991), smallmouth bass have been identified in pools just below the North Fork Crossing. Competition for food and space occurs between smallmouth bass and trout. Current habitat conditions (mainly water quality) favor smallmouth bass. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat along the lower North Fork is judged to be presently in unsatisfactory (fair) condition because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway to improve habitat conditions through changes in grazing practices along the North Fork and its headwater tributary streams (segment C5b).

Most streams in southwest Idaho suffer from similar fisheries habitat degradation to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, which streams have the potential to have outstanding fisheries values? The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that the lower North Fork Owyhee River has the potential as an outstanding fishery given anticipated improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors.

Conclusion:

The lower North Fork Owyhee River presently does not have outstanding remarkable fisheries values. However, with anticipated improvements in habitat conditions and subsequent increases in fish populations and sizes, the North Fork has the potential for an outstandingly remarkable fisheries values. The presence of smallmouth bass (warm water fishery) in the lower North Fork is unique only to a few streams in the Owyhee Resource Area; thus, further contributing to outstandingly remarkable values.

5. Wildlife Values

The lower North Fork Canyon provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly Preble's shrew. The lower North Fork Canyon has been identified as a potential reintroduction site for California bighorn sheep. Habitat conditions are currently rated as unsatisfactory (fair); see Owyhee MSA.

The waters of the lower North Fork Owyhee River are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). The high, well fractured and otherwise eroded cliffs of the canyon are considered outstanding habitat for cliff nesting raptors. A small number of bald eagles (a federally listed endangered species) that occasionally winter along the canyon walls of the upper Owyhee River system. These cliffs are also suspected to support populations of the spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). The North Fork Canyon of both Idaho and Oregon (National Wild River) contains a much greater diversity of riparian and upland vegetation species; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The lower North Canyon, along with several other river segments, represents the biggest and best of these habitats and, therefore, possesses outstanding wildlife values.

Conclusion:

The lower North Fork Canyon possesses outstandingly remarkable wildlife values because of the regional and national significance of its wildlife habitats.

6. Prehistoric Cultural Values

A cultural resource inventory of the lower North Fork Canyon has not been completed. There are no known prehistoric archaeological sites. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the river corridor may contain significant cultural resource values. Field work to identify sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the lower North Fork Owyhee River cannot be determined at this time.

7. Historic Cultural Values

No known historic values exist within the lower North Fork Canyon.

Conclusion:

The North Fork Canyon does not possess any known outstandingly remarkable historic values.

8. Other Similar Values

No other outstandingly remarkable values are identified for the lower North Fork Owyhee River.

III. Eligibility and Classification

The lower North Fork Owyhee River is eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, geologic, and wildlife values. The river segment also has the potential for outstandingly remarkable fisheries values.

The 4.0 miles of free-flowing river extending downstream of the North Fork Crossing bridge to the Oregon border which should be classified as a potential wild river. Cultural modifications associated with the road crossing and the North Fork Recreation Site are not sufficient to warrant a less restrictive classification on the short length (.5 miles) of affected river corridor.

Classification Considerations for the Owyhee RMP:

To allow for possible construction of a trail down the lower North Fork Canyon under the Owyhee Uplands Byway development program as proposed in the Owyhee RMP, a suitable recommendation would have to call for classifying at least the first .5 miles of river corridor, to just below the Pinnacles, or the entire segment in Idaho as a scenic river (VRM Class II). Recent (1991) preliminary trail studies indicate that a number of small bridge crossings of the North Fork channel are needed if a trail is to be built to the Oregon border. Such bridges would not be consistent with a wild river (VRM Class I) classification.

Upper North Fork Owyhee River and Tributaries
Segment C5b

I. Physical Description

1. Location

a. North Fork Owyhee River: Deep Creek-Mud Flat Road crossing (North Fork Crossing) upstream to headwaters.

b. Juniper Creek: confluence with North Fork upstream to crossing of Cliffs-Indian Meadows road.

c. Cabin Creek: confluence with Juniper Creek upstream to crossing of Cliffs-Indian Meadows road.

d. Corral Creek: confluence with Cabin Creek upstream to crossing of Cliffs-Indian Meadows road.

e. Noon Creek: confluence with North Fork upstream to crossing of Big Springs road.

f. Pleasant Valley Creek: confluence with North Fork upstream to mouth of canyon (southern subdivision line NW4NW4, Sec. 7, T. 10 S., R.4 W.

2. Length (preliminary eligible only)

a. North Fork Owyhee River:	16.0 miles
b. Juniper Creek:	1.5 miles
c. Cabin Creek:	3.5 miles
d. Corral Creek:	1.0 miles

e. Noon Creek:	3.0 miles
f. Pleasant Valley Creek:	3.5 miles
Total:	28.5 miles

3. Affected Non-federal Lands

Private:

North Fork Owyhee River corridor: 320 acres

T. 9 S., R. 5 W., Sec. 31, SE4NW4, SW4NE4, E2SW4 W2SE4 NE4SE4.
Sec. 32, SW4NW4.

State:

North Fork Owyhee River corridor: 440 acres

T. 9 S., R. 5 W., Sec. 36, E2NW4 NW4NE4 S2NE4, SW4, N2SE4.

4. Landscape Characteristics

The North Fork Owyhee River drains a large, extremely convoluted rhyolite outcrop country in the middle of the Owyhee Resource Area; flowing 20 miles westward to the Oregon stateline. The river meanders through an extremely narrow, vertical-walled canyon reaching depths of over 400 feet. The canyon begins with the convergence of numerous draws which drain snowmelt from a rugged landscape containing a multitude of diversely eroded rock outcrop formations. Intermingled shallow soils support a thin canopy of gnarled juniper. As the river cuts into the fractured rhyolite, vertical walls loom over the channel. The upper cliffs are highly eroded into a myriad of diversely shaped spires which march upslope to merge with surrounding outcrop formations. Junipers pour into the soil areas between the spires. Some juniper are content to grow directly from fractures in the bedrock. About 7 miles from its headwaters, a mantle of bedrock forming Nickel and Pleasant Valley Tables caps the rhyolite pinnacle formations on the south side of the canyon with a nearly continuous wall of blocky fractured basalt rimrock and associated rubble slopes. Another isolated basaltic tableland helps form the northern wall of the canyon near the confluence of Pleasant Valley Creek at about mile-12. At the base of the cliffs, water seeps from fractures to nourish clinging, lush, plant communities. Larger seeps or springs help retain flows in the river channel during summer months; producing a ribbon of water and riparian vegetation including willow, chokecherry, aspen, dogwood, alder, rose, current, sedges, and grasses.

The rhyolite canyon walls open up briefly at mile-16 to allow the passage of the Owyhee Uplands National Back Country Byway. This point is known as the North Fork Crossing. From the crossing bridge to the Oregon stateline is the lower North Fork Owyhee River Segment C5a.

Joining with the North Fork Owyhee River on its journey to Oregon are five major tributary streams: Pleasant Valley, Noon, Juniper, Cabin, and Corral Creek.

From the south, Pleasant Valley Creek originates within the juniper-grassland basin country in the vicinity of the Byway. For the first 4 miles the stream meanders through privately owned, irrigated pasture lands and public lands of good scenic quality. About 3.75 miles before reaching the North Fork Owyhee River, the stream cuts into the Pleasant Valley tablerock; producing a talus slope canyon framed by blocky fractured basalt rimrocks. At this point begins the stream segment described in this document. As the stream cuts beneath the basalt, it takes a tortured course through vertical walls of rhyolite identical in character to those of the North Fork.

From the north, two major canyons enter the North Fork Canyon about equal distance (about 2 miles) on either side of the Pleasant Valley Creek confluence. The upstream canyon is that of Noon Creek: its headwaters originating in the Indian Meadows area. Canyon scenery identical in character to the North Fork begins about 3 miles upstream of the confluence where the dirt road to Big Springs crosses the stream channel. The downstream canyon is that of Juniper Creek which has already merged with Cabin Creek and Corral Creek before joining with the North Fork. The lower canyon areas of each of these streams have the same landscape character of the North Fork Canyon beginning approximately at the points where the Cliffs-Indian Meadows dirt road crosses each of the stream channels.

5. Cultural Modifications

The upper North Fork Owyhee River runs free-flowing from its headwaters minimally affected by cultural modifications until reaching an old homestead on private lands about .75 miles upstream of the North Fork Crossing. Along its upper reaches the river corridor is affected only by several barbed wire fencelines extending to or across the river channel and occasional rimrock gap fences. At the homestead is a cabin and corral accessed by a primitive dirt road from the north.

The northern tributary streams, Noon, Juniper, Cabin, and Corral Creeks each begin their journey through the river segment from primitive dirt road crossings. From these crossings downstream the creeks are free-flowing. Cabin Creek is affected by a primitive dirt road crossing just below (.25 miles) the Corral Creek confluence. Corral Creek has a fence crossing just above (.25 miles) its confluence with Cabin Creek. Rimrock fencing occurs elsewhere with minimal affect on the stream corridor.

The southern tributary stream, Pleasant Valley Creek, flows unaffected through its canyon.

6. Existing Land Management Designations

All but the lower 1.25 miles of this river segment flows through the North Fork Owyhee Backcountry Special Recreation Management Area (SRMA). Contained within the SRMA designation is the North Fork Owyhee River Wilderness Study Area (WSA). The WSA excludes the 1.0 miles of Corral Creek and the upper 1.5 miles of Cabin Creek.

The National Park Service has recommended a National Natural Landmark designation affecting the middle portion of the North Fork Owyhee River.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the rhyolite rock outcrop country of the North Fork Owyhee River and its northern tributaries as having Class A scenic quality. This assessment was reaffirmed during the wilderness inventory process (see Wilderness Scenic Quality Inventory and Evaluation Form).

The upper North Fork Canyon and its tributary canyon landscapes are dominated by vertical lines and forms of course-textured, brownish, diversely eroded cliffs, often glazed with yellow to light green microflora. Intermingled subordinate triangular forms and diagonal lines associated with talus slopes frame medium-textured, yellow and subdued green sagebrush-bunchgrass communities and dark green juniper which all have a scattering of indistinctive lines. Medium-textured, rich green riparian vegetation follows the meandering line of sparkling pools and slow to fast moving water tinted with green and brown channel colors. Blue sky and a blend of forms, colors, and lines from surrounding cliffs and slopes reflect from the pools. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create exceptionally scenic landscapes. From a scarcity standpoint, the rhyolite rock outcrop country with its numerous, narrow, vertical-relief stream corridors is widespread over the central portion of the Owyhee Resource Area. The upper North Fork Owyhee River and its tributary streams, as well as the Current Creek stream complex (see segment S8a) found within the North Fork Owyhee Backcountry SRMA, are among the best representations of this scenic rhyolite rock outcrop geographic area.

Conclusion:

The upper North Fork Owyhee River and its tributary canyons offer a landscape of landforms, vegetation, and water that possess scenic qualities of outstandingly remarkable value. These canyons represent some of the best rhyolite rock outcrop scenic areas in southwest Idaho.

2. Recreational Values

The upper North Fork Owyhee River Canyon and its tributary streams, like other smaller streams within the Owyhee Canyonlands system, offers outstanding low-water backpacking opportunities during the summer months. Current recreational use is low, however, the upper North Fork's scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract backpackers from the Pacific Northwest (PNW) region once its opportunities are more widely known. Louse Canyon of the West Little Owyhee River (canyon of similar quality but no woodlands), which enters the Owyhee River in Oregon, currently attracts Pacific Northwest (PNW) backpackers on a regular basis. The upper North Fork canyon complex provides diversity in backpacking opportunities in the Owyhee Canyonlands system by providing a more lush and wooded environment.

Water flows and channel characteristics make whitewater boating opportunities impractical to impossible.

Conclusion:

Backpacking opportunities in the upper North Fork Owyhee River complex are judged to be outstandingly remarkable. These values are enhanced when considered in context of the entire Owyhee Canyonlands system.

3. Geologic Values

The upper North Fork Owyhee River system has geologic formations predominantly of volcanic origin (Miocene). The canyon system exposes up to 400 vertical feet of rhyolitic welded tufts and tuffaceous sediments partially capped in places with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured monolithic cliff walls from the rhyolite, including "hoodoos" or rock pinnacles. If overlying basalt is present, the rhyolite formations are nestled in the rubble slopes below vertical walls of basalt.

The geologic features carved by the upper North Fork Owyhee River and its tributaries are typical of those found throughout the Owyhee Canyonlands complex and other drainages of southwest Idaho. The geologic features found in other segments of the Owyhee Canyonlands system and the Bruneau-Jarbidge River system are more extensive and of larger scale. Though not unique to southwest Idaho, the presence of such geologic formations in great abundance and size throughout the Owyhee Canyonlands makes these canyonlands geologically unique from a national perspective. The upper North Fork Canyon is considered an integral part of the overall geologic picture.

Conclusion:

The geologic features of the upper North Fork Owyhee River complex contribute to the overall outstandingly remarkable geologic values of the Owyhee Canyonlands when considered from a national perspective.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified nine species of fish in the upper North Fork Owyhee River and its tributary streams including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpin, northern squawfish, largescale sucker, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the upper North Fork drainage system is judged to be presently in unsatisfactory (fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway to improve habitat conditions through changes in grazing practices along the North Fork and its headwater tributary streams.

Most streams in southwest Idaho suffer from similar fisheries habitat degradation to varying degrees. Assuming the BLM is successful in improving fisheries habitat conditions throughout the resource area, which streams have the potential to outstanding fisheries values? The mere presence of redband trout in an resource area stream does not justify an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that the upper North Fork Owyhee River from Big Springs Draw downstream has the potential as an outstanding fishery given anticipated improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors. Though such improvements are expected to occur on the remainder of the upper North Fork and its tributary streams these streams would not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

The upper North Fork Owyhee River and its tributary streams presently do not have outstandingly remarkable fisheries values. However, with anticipated improvements in habitat conditions and subsequent increases in fish populations and sizes, the upper North Fork has the potential for outstandingly remarkable fisheries values.

5. Wildlife Values

The upper North Fork Canyon and its tributary canyons provide upland and riparian habitats for a number of wildlife species including elk, mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly the Preble's shrew. The western, deeper canyon area of the upper North Fork has been identified as a potential reintroduction site for California bighorn sheep. Habitat conditions are currently rated at unsatisfactory (fair to poor); see Owyhee MSA.

The waters of the North Fork Owyhee River downstream of Big Springs Draw are considered outstanding habitat for river otter (sensitive species) because of the adequate year-long flows and a good prey base (fisheries). Flows on the uppermost reaches of the North Fork and in its tributaries limit river otter use. The high, well fractured and otherwise eroded cliffs of the canyon are considered outstanding habitat for cliff nesting raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). The upper North Fork Canyon and its tributary canyons contain a much greater diversity of riparian and upland vegetation species; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The upper North Fork River segment, along with several other segments, represents the biggest and best of these habitats and, therefore, possesses outstanding wildlife values.

Conclusion:

The upper North Fork Owyhee River and its tributary streams possess outstandingly remarkable wildlife values because of the regional and national significance of their wildlife habitats.

6. Prehistoric Cultural Values

A cultural resource inventory of the upper North Fork Owyhee River system has not been completed. However, a number of archaeological sites have been identified in the area. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District

Class II Cultural Resource Inventory suggests that the stream corridor of the upper North Fork watershed may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable cultural values along the upper North Fork Owyhee River cannot be determined at this time.

7. Historic Cultural Values

No known historic sites exist on public lands within the upper North Fork Owyhee River corridor nor its tributary stream corridors. However, a cabin characteristic of those built in the late-19th and early-20th centuries is located on private lands along the North Fork about .75 miles upstream of the North Fork Crossing (see Section 3). The site is typical of many such sites found on both public and private lands throughout southwest Idaho. The site is not judged to be eligible for the National Register of Historic Places (NRHP) based upon its individual significance. However, taken collectively with other sites scattered throughout the Owyhee Canyonlands, it would probably qualify for inclusion on the NRHP as a contributing element of a Historic Site District centered around early ranching within the various tributaries of the Owyhee River.

Conclusion:

No historic resources of outstandingly remarkable value are known to exist within the upper North Fork River segment.

8. Other Similar Values

In 1987, the National Park Service (NPS) recommended that a 4,413-acre area of the North Fork Owyhee Backcountry SRMA has potential as a National Natural Landmark (NNL). The North Fork NNL proposal contains over 5 miles of the upper North Fork Owyhee River Canyon upstream of its confluence with Noon Creek. The Big Springs Draw is centrally located in the NNL.

The NPS evaluated five Montane Western Juniper Woodland sites from Oregon and Idaho to determine their suitability as NNLs based upon illustrative character, condition, diversity, rarity, and value for science and education. The evaluation determined that the North Fork site was the best example of the Montane Western Juniper Woodland Subtheme for the Western Juniper Woodland Theme in the Columbia Plateau National Region.
Conclusion:

A portion (approximately 5 miles) of the upper North Fork Owyhee River Canyon has outstandingly remarkable vegetation values as the best representation of the Montane Western Juniper Woodland Subtheme within the Columbia Plateau Natural Region.

III. Eligibility and Classification

The upper 16.0 miles of the North Fork Owyhee River and 12.5 miles of its tributaries (Juniper, Cabin, Corral, Noon, and Pleasant Valley Creeks) are eligible for further consideration as congressionally designated rivers because of outstandingly remarkable scenic, recreational, geologic, wildlife, and vegetation (North Fork only) values. The North Fork Canyon also has the potential for outstandingly remarkable fisheries values.

There are 28.5 miles of free-flowing rivers extending upstream of the North Fork Crossing bridge, including the North Fork Owyhee River to its headwaters, which should be classified as potential wild rivers. Cultural modifications associated with the private properties located about .75 miles upstream of the bridge are not sufficient to warrant a less restrictive classification on the affected length (.5 miles) of river corridor.

Classification Considerations for the Owyhee RMP:

The Owyhee RMP is proposing the construction of about 30 miles of foot trails in the upper North Fork area (North Fork Owyhee Backcountry SRMA). Such construction would be inconsistent with a wild classification because of the need for bridges across the river channel in several places. Therefore, the Owyhee RMP should consider a scenic (VRM Class II) suitability classification for the upper North Fork Owyhee River.

Boulder - Rock Creek
Segment C9

I. Physical Description

1. Location

a. Rock Creek: From western legal subdivision for Section 16, T.7 S., R. 3 W., downstream to confluence with the North Fork Boulder Creek.

b. North Fork Boulder Creek: Confluence of Rock Creek downstream to confluence with South Fork Boulder Creek.

c. Boulder Creek: Confluence of North Fork and South Fork Boulder Creek downstream to southern boundary of private property in N2, Section 32, T. 6 S., R. 4 W.

2. Length - (preliminarily eligible only)

a. Rock Creek:	3.5 miles
b. N. Fk. Boulder Creek:	3.75 miles
c. Boulder Creek:	4.25 miles
Total	11.5 miles

3. Affected Non-federal Lands

Private:

N. Fk. Boulder Ck. corridor: 340 acres

T. 7 S., R. 4 W., Sec. 11, S2SW4, S2SE4.
Sec. 12, S2SW4.
Sec. 13, N2NW4NW4, N2NE4NW4.
Sec. 14, E2NW4NE4, NE4NE4.

State:

Boulder Creek corridor: 80 acres

T. 7 S., R. 4 W., Sec. 16, N2NE4.

4. Landscape Characteristics

This segment begins with Rock Creek flowing westward out of the Triangle basin area within a 400-foot deep canyon. The canyon originates about three-quarters of a mile upstream on private property near the confluence of Rose Creek. By the time Rock Creek joins with the North Fork Boulder Creek at mile-3.5, topography to the south reaches 700 feet above the stream channel where the surrounding plateau basin transforms into a mountainous, rock outcrop region that extends across the center of the Owyhee Resource Area in the South Mountain - Combination Ridge country. To the north the surrounding highly convoluted plateau landscape remains at 400 to 500 feet above the stream channel. Further north the basin gives rise to the Owyhee Mountain Range. The canyons of both Rock Creek and North Fork Boulder Creek have been carved into predominately rhyolite rock. The canyon landscapes are that of very steep, talus slopes intermixed with sheer, monolithic cliffs eroded into a myriad of fractured columnar forms, some of which stand as individual pinnacles or spires known as "hoodoos." The cliffs are concentrated at the upper elevations of the canyons. Unlike many of the rhyolite canyons in the Owyhee Resource Area, the cliffs are not continuous. They appear as "castles" of rock amid an otherwise V-shaped canyon landscape. Extending from rounded ridgelines, talus slopes descend to the extremely meandering stream channel; frequently being interrupted by cliffs and rock outcrops.

The talus slopes are a mosaic of rhyolite rubble fields, where few plants grow, and shallow to deep soil areas covered with sagebrush-grassland communities. Scattered throughout the canyon at all elevations is western juniper. It exists as lone, old-growth trees that choose to grow directly from the fractures in bedrock cliffs and outcrops, or as thin to dense stands of mature to young-aged trees in areas of more soil. Juniper also grows in the riparian plant community along with willow, chokecherry, dogwood, alder, rose, currant, sedges and grasses. Riparian vegetation along the streams can be extensive.

As North Fork Boulder Creek joins with the South Fork, remnant basaltic flows influence the character of the landscape. The rhyolite is buried beneath a thin mantle of basalt that defines the rimrock of Boulder Creek Canyon. The canyon rimrock is a nearly continuous, vertical wall of blocky fractured bedrock. Talus slopes extend from the base of the rimrock to the stream channel; only occasionally being interrupted by small cliffs of exposed rhyolite bedrock.

As in the upper reaches of the stream segment, a mosaic of rock rubble fields, sagebrush-grasslands communities, and scattered juniper cover the talus slopes. Along the stream channel is a riparian community of willow, chokecherry, dogwood, alder, rose, currant, sedges, grasses, and only an occasional juniper.

5. Cultural Modifications

The canyon of Rock Creek is free of cultural modifications other than an occasional gap fence across the opening to side draws. Cultural modifications begin at, and are concentrated on, the private properties extending for nearly two miles along North Fork Boulder Creek from its confluence with Rock Creek. The imprints of man in this stretch of stream include a historic cabin site near the streams' confluence, a old jeep trail extending over the north rim of the canyon in the vicinity of the cabin, evidence of stream gravel removal along much of the stream channel, a dirt road crossing on the west end of the properties, and a scattering of barbed wire fences. The gravel removal activities have also extended approximately one-quarter mile onto BLM lands downstream of the private properties. The road crossing includes several switchbacks and pushed over trees. On Boulder Creek, there is a fence across the bottom of the canyon about one-quarter mile below the confluence of Deer Creek. Also, a fence extends across the canyon bottom just before the end of the segment (one-quarter mile upstream of the lower private properties that define the segment). Another three-eights of a mile above this lower fence an old jeep trail extends to the stream's north shore after traversing the bottom of a side draw. At the creek is the remnants of an old livestock bridge. A number of jeep trails dead end at the rimrock of Boulder Creek Canyon, but they are not within nor visible from the stream corridor. Lastly, a recent (1991) fire burned into the North Fork Boulder Creek Canyon from the north; its visual affected will be short-lived.

6. Existing Land Management Designations

The entire river segment, with the exception of the North Fork Boulder Creek private properties, lies within the Boulder Creek Outstanding Natural Area (ONA) identified by the Owyhee MFP. No recreation activity planning for this ONA has been done. The ONA will be re-evaluated under the BLM's area of critical concern (ACEC) guidelines during the Owyhee RMP process.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS and Bruneau Grazing EIS identified the entire Boulder-Rock Creek segment as having Class A scenic quality. The EIS visual assessment for the Boulder-Rock Creek canyon complex appears consistent with that of other assessments done for visual resources during the wilderness inventory.

The scenic landscapes of the North Fork Boulder-Rock Creek canyon complex are dominated by a mixture of long, diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities and/or dark green juniper, as well as medium-textured reddish colored rhyolite rubble fields. Intermixed with the talus slopes are subordinate vertical lines and forms of coarse-textured, reddish brown eroded cliffs often glazed with yellow to light green microflora. In Boulder Creek Canyon, the landscape is dominated by both vertical lines and forms associated with coarse-textured, blackish basalt rimrocks and the lines, forms, colors, and textures of talus slopes. Because of the presence of larger rock rubble of richer color and coarser texture, the talus slopes take on a different appearance than those further upstream. Throughout the entire canyon system, medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of fast moving brownish, silt laden water with some whitewater rapids and boulders. During the summer months, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create an exceptionally scenic landscape. Contributing significantly to the quality of the landscape in the canyon system is the interchange of vertical cliffs and talus slopes as the creek follows an extremely meandering course. From a scarcity standpoint, the Boulder-Rock Creek landscape of juniper/sagebrush-grasslands and rhyolite/basaltic rubble is not unique to southwest Idaho river or stream canyons. The scenic quality of the Boulder-Rock Creek canyon complex is comparable to that found in the Owyhee River Canyonlands.

Conclusion:

The Boulder-Rock Creek segment offers a landscape of diverse landforms, vegetation, and water that possesses scenic qualities of outstandingly remarkable value. This canyon system's scenery is comparable to that of the Owyhee Canyonlands.

2. Recreational Values

The Boulder-Rock Creek canyon complex offers backpacking or day-hiking opportunities during the spring, summer and fall mouths. The fall season also brings excellent hunting opportunities. Other than hunting, current recreational use is low, and is expected to remain relatively low. The canyons' scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract backpackers only from the geographical area (southwest Idaho) and not from the Pacific Northwest (PNW) region. There are many other canyons of greater length and of equal or greater scenic quality in the Owyhee River system of southwest Idaho and southeast Oregon that will attract visitors from the Pacific Northwest (PNW). Louse Canyon of the West Little Owyhee River, which enters the Owyhee River in Oregon, presently attracts Pacific Northwest (PNW) backpackers on a regular basis.

The Boulder-Rock Creek segment does contain sufficient flows and appropriate channel structure to allow boating opportunities for a short period of time during the spring months. The stream is suitable for use by kayak and open canoe. Few boaters have yet to run the stream. Boaters from the Pacific Northwest (PNW) and the rest of the western United States are expected to continue concentrating their efforts on the Owyhee River and Bruneau-Jarbidge River system of southwest Idaho and southeast Oregon. Boating use of the Boulder-Rock Creek segment is expected to remain low and be from the local geographical area only.

Conclusion:

Kayaking, canoeing, and backpacking opportunities along the entire length of the Boulder-Rock Creek segment are judged to be a significant recreational resource. However, these opportunities are not considered to be outstandingly remarkable for southwest Idaho as a whole.

3. Geologic Values

Like many of the canyons of southwest Idaho, the Boulder-Rock Creek canyon complex has geologic formations predominately of volcanic origin (Miocene). The canyons expose 400 to 700 vertical feet of rhyolitic welded tufts and tuffaceous sediments. In Boulder Creek Canyon, the rhyolites are topped with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured monolithic cliffs from the rhyolite and basalt.

The geologic features carved by the Boulder-Rock Creek stream complex are significant features of its canyons, but they are not unique to southwest Idaho. Examples of similar geologic features are found throughout the Owyhee Canyonlands system and the Bruneau-Jarbidge River system. These canyon systems have rhyolite and basalt formations in much greater abundance, size, and diversity than those of the Boulder-Rock Creek canyon complex.

Conclusion:

The geologic features of the Boulder-Rock Creek canyon complex are considered to be significant resource values. However, they are not judged to be outstandingly remarkable geologic values for southwest Idaho as a whole.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified nine species of fish in the Boulder-Rock Creek complex, including speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpin, northern squawfish, largescale sucker, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Boulder-Rock Creek segment is judged to be presently in unsatisfactory (poor to fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway along the Boulder-Rock Creek drainages and its headwater streams to improve habitat conditions through changes in grazing practices.

Most streams in southwest Idaho suffer from similar fisheries habitat concerns to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, which streams have the potential to have outstanding fisheries values? The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that Boulder Creek, downstream from the confluence of the North Fork and Rock Creek, has potential as an outstanding fisheries given anticipated improvements in summer flow volumes, cooler temperatures, reduced siltation, and cover factors. Fish population numbers and sizes could be superior to the average resource area stream. Above the confluence, neither the North Fork Boulder Creek or Rock Creek would contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

The Boulder-Rock Creek segment presently does not have outstanding remarkable fisheries values. However, with anticipated improvements in habitat conditions and subsequent increases in fish populations and sizes, Boulder Creek (below the North Fork-Rock Creek confluence) has the potential for outstandingly remarkable fisheries values.

5. Wildlife Values

The Boulder-Rock Creek canyons provide upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly elk, California bighorn sheep and the Preble's shrew. Habitat conditions are currently rated as unsatisfactory (fair); see Owyhee MSA.

The waters along Boulder and Rock Creek are considered outstanding habitat for river otter (sensitive species) because of adequate year-long flows and a good prey base (fisheries). The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nesting raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) occasionally inhabit the canyons, probably migrating from the established population of the Little Jacks Creek area (Bruneau Resource Area). Elk may also be moving into the area from South Mountain.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly when the canyon possesses a large diversity of vegetation species. The Owyhee National Wild River designation of Oregon contains deep canyon habitats comprised largely of sagebrush-bunchgrass communities extending to the river's edge with little well developed riparian vegetation (mostly grasses and some willow species). The Boulder-Rock Creek canyon complex contains a much greater diversity of riparian and upland vegetation species than the main Owyhee River system; thereby supporting larger, more diverse wildlife populations. Many of the tributaries which feed the Owyhee River system from Idaho have such riparian diversity tucked away in narrow canyons. The Boulder-Rock Creek complex, along with several other segments, represent the biggest and best of these habitats and, therefore, possesses outstanding wildlife values.

Conclusion:

The Boulder-Rock Creek canyon complex possesses outstandingly remarkable wildlife values because of the regional significance of its wildlife habitats.

6. Prehistoric Cultural Values

A cultural resource inventory of the Boulder-Rock Creek complex has not been completed. However, a number of archaeological sites have been identified in the area. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridor of the Boulder-Rock Creek segment may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the Boulder-Rock Creek segment cannot be determined at this time.

7. Historic Cultural Values

A cabin representative of those constructed in the late-19th and early-20th centuries is found on private property along the south side of North Boulder Creek just below the Rock Creek confluence. The site is typical of those found on both public and private lands throughout southwest Idaho. The site is not judged to be eligible for inclusion on the National Register of Historic Places and, as such, is not considered to be outstandingly remarkable.

Conclusion:

The Boulder-Rock Creek canyon complex is not known to contain any historic resources of outstandingly remarkable value.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Boulder-Rock Creek segment.

III. Eligibility and Classification

The entire 11.5 miles of the Boulder-Rock Creek segment are eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic and wildlife values. The stream segment also has the potential for outstandingly remarkable fisheries values.

The 3.5 miles of Rock Creek, the 3.75 miles of North Fork Boulder Creek, and the 4.25 miles of Boulder Creek should be classified as a potential wild river. Cultural modifications on public lands, and associated with private properties surrounding the North Fork Boulder Creek road crossing, are presently not sufficient to warrant less than a wild river classification on all affected lands.

Classification Considerations for the Owyhee RMP:

The channel gravels along nearly two miles of public and private lands on the North Fork Boulder Creek are periodically removed for road surfacing. The continuation of such activities would not be consistent with the long-term management of this stretch of stream as either a wild, scenic, or recreational river. The suitability of the stream segment above the North Fork Boulder-Combination Creek confluence would be dependent on federal acquisition (the Wild and Scenic Rivers Act requires that acquisitions be voluntary), and the termination of gravel activities. The stream channel is an important source of gravel in the region. Its importance may grow if the Idaho State Department of Lands proposal to build a gravel road from the Triangle Road into the large block of state lands in the Combination Ridge country becomes a reality. The proposed gravel road would cross the North Fork Boulder Creek at the present location of the dirt road. Therefore, during the suitability determination for the Boulder-Rock Creek segment, the Owyhee RMP will have to address road construction and maintenance options as they relate to a suitability classification. One option would be to propose a wild river corridor only from about Combination Creek downstream; leaving most of the North Fork Boulder Creek and all of Rock Creek as nonsuitable. Another option would be to give the stream corridor another designation such as an ACEC. An ACEC evaluation is required of the existing Outstanding Natural Area designation.

Jump Creek
Segment N8

I. Physical Description

1. Location: From livestock division fence, in Sec 8, T. 1 N., R. 5 W., downstream to the south boundary of private property in the N2NE4, Sec. 27, T. 2 N., R. 5 W.

2. Length (preliminarily eligible only): 4.5 miles

3. Affected Non-federal Lands: None

4. Landscape Characteristics

Jump Creek starts its free-flowing course through this segment just as it exits the northern end of Sands Basin within the Owyhee Mountain Range. As the stream channel leaves the basin, it immediately begins a rapid descent into a narrow, meandering canyon. The landscape quickly changes to that of a sheer-walled chasm where rhyolite cliffs rise directly from the stream or from small talus slopes that intermittently shape the course of the stream. The cliffs are eroded into a myriad of highly fractured, columnar-shaped forms. The canyon reaches a depth of 600 feet and averages less than one-quarter mile across along much of its length.

Within the canyon, isolated pockets of sagebrush-bunchgrass communities occupy the talus slopes tucked between the cliffs of an otherwise vertical landscape of rock. In the bottom of the canyon, four riparian communities grow along Jump Creek. In the uppermost reaches of the canyon there is no perennial flow. There is only spring snowmelt or flash flooding from thunderstorms that takes place. The annual high water scouring limits shrubby riparian vegetation. Riparian vegetation consists mostly of tall forbs and mesic-site grasses. Ephemeral pools and deep, isolated pools that last year-round are common. About two miles into the canyon a series of numerous springs discharge along a one-quarter mile stretch of the creek. Below these springs the amount of water in Jump Creek appears to remain constant all the way through the remainder of the segment, except during high water periods. Below the springs, a very dense, shrubby riparian community occurs. It is almost totally dominated by syringa. Lesser amounts of red-osier dogwood occur. At the mid-point of the canyon, the stream flows over a series of cataracts within a very narrow gorge. Below the cataracts the canyon once again widens and another riparian community of much different aspect develops. Two water birch communities can be readily discerned. One with scattered birch and a dense shrub understory of syringa and occasionally re-osier dogwood. The second has dense stands of tall water birch bordering and overhanging the stream channel with no understory shrub component. As the canyon bottom widens, this forest gallery forms a continuous band of riparian vegetation to the top of Jump Creek Falls.

Jump Creek Falls is a vertical falls of about 60 feet that topographically isolates the upper 4 miles of the canyon bottom from the remaining one-half mile of stream. Below the falls, the riparian communities continue until the end of the segment. However, one-quarter mile below the falls the large canyon abruptly ends as the surrounding rhyolite plateau is replaced by the peneplain lands that extend southward from the Snake River. The peneplain is a moderately convoluted landscape of eroded rhyolites and sedimentary rock strata. The last one-quarter mile of the stream segment is contained in a small, narrow, sheer-walled canyon of rhyolite noted for its gas pocket formations.

5. Cultural Modifications

The segment begins with the east-west crossing of the stream channel by a barbed wire fence. The segment ends with another fence reaching to the rimrock above the creek near the northern private property. Between the fencelines, Jump Creek Canyon is free of cultural modifications until the stream reaches Jump Creek Falls. Below the falls (last one-half mile of the segment), the stream is affected by recreation developments and by the scars of abusive recreational visitor behavior. For many years the lower canyon has been marred by vandalism (spray painting), littering, multiple trailings (foot trails caused by uncontrolled visitor use) and associated erosion problems, and by the affects of human waste. Just outside the canyon, where a gravel road extends to the mouth of the canyon from South Jump Creek Road, the steep slopes of the plateau front are defaced by off-road vehicle use and associated erosion. In 1988, the BLM began efforts to restore the scenic, recreational and watershed resources of the lower canyon area by constructing a parking lot with barriers posts, installing culverts in the existing access road and making other road improvements, and by building a one-quarter mile long trail to the base of the falls. However, ORV use continues to remain a serious problem. Also, uncontrolled foot traffic at the falls continues to denude and erode surrounding talus slopes. The affects of recreation use extend a short distance above the falls in the form of trailings and litter. Additional work will include staircases associated with the trail and parking lot, and possibly a trail bridge across the creek. A toilet and fire grills may also be considered.

6. Existing Land Management Designations

The entire length of the Jump Creek segment lies within the Jump Creek Special Recreation Management Area (SRMA) established by the Owyhee MFP. The majority of the canyon is also overlaid by the 465-acre Jump Creek Recreation Site.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the Jump Creek Canyon area as having Class A scenic quality. This scenic quality rating is consistent with the visual assessments completed for other canyon areas during the Owyhee wilderness inventory.

The scenic landscape of Jump Creek Canyon is dominated by high, vertical lines and forms of coarse-textured, brownish, eroded cliffs, often glazed with yellow to light green microflora. Intertwined with the vertical features are subordinate diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities. A medium-textured, rich green band of riparian vegetation extends across the bottom of the canyon, often covering the meandering line of a spring time river channel filled with fast-moving brownish, silt laden waters The river channel contains numerous stretches of whitewater rapids and immense boulders. As water recedes, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes along much of the stream segment's length. The combination of lines, forms, colors, and textures found amidst this close association of landforms, vegetation, and water create an exceptionally scenic landscape. Contributing significantly to the quality of the canyon landscapes is the interchange of vertical cliffs and talus slopes and the presence of the lush riparian communities. From a scarcity standpoint, the sagebrush/rhyolite cliff association is widespread over southwest Idaho. However, the inclusion of the riparian communities of birch in the landscape makes it unique to southwest Idaho.

Conclusion:

The Jump Creek segment offers canyon landscapes of diverse landforms, vegetation and water that possesses scenic qualities of outstandingly remarkable value.

2. Recreational Values

The Jump Creek segment provides outstanding day-hiking opportunities and associated activities such as sightseeing, photography, wildlife viewing, nature study, and picnicking. Some camping also occurs, as does unauthorized ORV activity. Recreation use occurs throughout the entire year except during periods of extreme cold or rain/snow. The very great majority of use comes from the local geographical area. However, recent efforts by the local business community to encourage tourist travel along the northern highway system of Owyhee County has brought increased visitation by tourists during the spring and summer months.

The quality of the recreation experiences available at Jump Creek are, however, influenced by the presence of organized youth-gang activity as well as by drunken “party” events that threaten the safety of visitors and degrade the resource base.

Jump Creek is not a boatable stream.

Conclusion:

The Jump Creek segment offers outstandingly remarkable day-use type activities in a primitive and roaded natural environment. The BLM’s ability to protect the recreation resource over the long term is dependent upon increased facility development and law enforcement presence.

3. Geologic Values

Like most canyons of southwest Idaho, Jump Creek Canyon has geologic formations predominately of volcanic origin (Miocene). Jump Creek Canyon exposes up to 600 vertical feet of rhyolitic welded tuffs and tuffaceous sediments. Ongoing weathering and erosion have carved a myriad of sculptured monolithic rock formations along its entire maundering course, including several small natural arches. Rhyolite cliffs are not unique to southwest Idaho. More significant examples of such geologic features are present in the Owyhee Canyonlands and on the Bruneau-Jarbidge River system. These other canyon areas have a greater abundance and diversity of rhyolite formations.

Conclusion:

The geologic features of Jump Creek are considered a significant resource value. However, they are not judged to be outstandingly remarkable for southwest Idaho as a whole.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified three species of fish in the Jump Creek segment, including dace, sucker, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Jump Creek segment is presently judged to be in satisfactory (good) condition below the canyon springs. There are good summer flows, low siltation, cooler water temperatures, and the presence of cover (Owyhee MSA). Above the springs, habitat conditions are rated as unsatisfactory (poor to fair) due to a lack of cover, warmer temperatures, and low to lacking summer flows. Efforts are underway further upstream on Jump Creek and its tributary streams to improve habitat conditions through changes in grazing practices. Such efforts may improve habitat conditions through increased summer flows, reduced siltation, and decreased temperatures in the upper reaches of Jump Creek Canyon. There should not be a notable change in existing good conditions in the lower canyon.

The mere presence of redband trout in an resource area stream is not justification for an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. While some improvement in fisheries habitat can be expected, Jump Creek will remain an "average" good condition stream, producing fish populations and sizes comparable to a typical resource area stream.

Conclusion:

The Jump Creek segment is considered to have significant fisheries values, but these values are not judged to be outstandingly remarkable for the resource area as a whole.

5. Wildlife Values

Jump Creek Canyon provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly California bighorn sheep and the Preble's shrew.

The high, well fractured and otherwise eroded cliffs of the canyons are considered outstanding habitat for cliff nestings raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) could potentially migrate to the canyon from established population areas located along the Owyhee Reservoir in southeast Oregon.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States, particularly if they contain a diversity of vegetation. In the case of Jump Creek Canyon, that diversity includes communities (birch) unique to southwest Idaho. The upland habitats within the canyons, which include many topographically isolated slopes nestled amid cliffs that are reachable only by mule deer and bighorn sheep, are in good to excellent condition (Owyhee MSA). Likewise, much of the canyon's riparian habitat is in good to excellent condition. A canyon system of such large size, and containing diverse habitats in good to pristine condition, possesses outstanding wildlife values.

Conclusion:

Jump Creek Canyon possesses outstandingly remarkable wildlife values. The unique vegetation communities in this segment contribute significantly to the overall value of Jump Creek Canyon as a regionally significant wildlife habitat area. Sensitive and possibly Category 2 federal candidate species are also present.

6. Prehistoric Cultural Values

A number of prehistoric archaeological sites have been found throughout the Jump Creek area, including at least one site within the Jump Creek segment. There is an archaeological site located within the Jump Creek Recreation Site near the parking lot. A archaeological site associated with a rock shelter site is currently under excavation on private property just downstream of the segment. The significance of the two sites is not yet known.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the Jump Creek corridor cannot be determined at this time.

7. Historic Cultural Values

There are no known historic sites along the Jump Creek segment.

Conclusion:

There are no outstandingly remarkable historic cultural values known to exist along the Jump Creek segment.

8. Other Similar Values

Upper Jump Creek Canyon contains unique riparian communities (birch) in good to excellent condition. These communities has been previously described. The canyon also contains upland vegetation communities in good to excellent condition. Each are worthy of study and protection. It also contains one rare plant species: Ivesia baileyi. This species occurs in cracks on cliff faces throughout the canyon. It is on the State of Idaho Monitor List.

Conclusion:

The Jump Creek segment is considered to have outstandingly remarkable vegetation values because of its unique riparian plant communities. The good to pristine vegetation condition for the canyon as a whole contributes to outstandingly remarkable vegetation values.

III. Eligibility and Classification

The entire 4.5 miles of the Jump Creek segment are eligible for further consideration as a congressionally designated river because of outstandingly remarkable scenic, recreational, wildlife (above falls), and vegetation (above falls) values.

The 4.0 miles extending downstream of the southern livestock division fence to the top of Jump Creek Falls should be classified and managed as a wild river. Cultural modifications are lacking.

The 0.5 miles extending downstream from Jump Creek Falls to the northern private property should be classified as a potential recreational river. The recreation developments along this length of stream warrant the less restrictive classification.

Classification Considerations for the Owyhee RMP:

The Jump Creek SRMA, which includes most of the Jump Creek stream segment, will be considered for an ACEC designation during the Owyhee RMP.

Final Non-Eligible Determinations for Rivers and Streams in the Owyhee Resource Area

On April 25, 1991, the Owyhee Resource Area released a list of rivers/streams totalling 1,218.5 miles that had been inventoried to determine their eligibility for consideration as national wild, scenic, or recreational rivers as defined by the Wild and Scenic Rivers Act (P.L. 90-542).

The 1991 listing identified 892.75 miles as being preliminarily non-eligible and 325.75 miles as preliminarily eligible. Since the listing, one additional segment (S3g) of 3.0 miles was evaluated for eligibility.

No public comment was received on the 892.75 miles of rivers/steams found preliminarily non-eligible that supported any segment being identified as eligible. Consequently, these 892.75 miles are hereby determined to be non-eligible for further consideration in the Owyhee RMP as wild, scenic, or recreational rivers.

There was strong local opposition to the listing of 325.75 miles of rivers/streams as preliminarily eligible. In general, public comment indicated that the BLM's preliminary assessments were inaccurate in their interpretation of "outstandingly remarkable" values. The BLM, Owyhee Resource Area staff re-evaluated all preliminarily eligible rivers/streams plus one additional small tributary of the East Fork Owyhee River. This re-evaluation has concluded that 223.0 miles of rivers/streams are eligible for a wild, scenic, or recreational river designation. The remaining 105.75 miles of preliminarily eligible rivers/streams are now determined to be non-eligible.

The final eligible determinations are provided in Appendix RECT-3. The final non-eligible determinations for the 105.75 miles of preliminarily eligible segments are provided in this document, Appendix RECT-4. The affected river/stream segments include:

Segment N5:	Reynolds Creek
Segment N7:	Squaw Creek
Juniper Mtn. Segments:	
S5b:	E. and W.Fk. Red Canyon Ck.
S6b:	Upper Petes Creek
S7c:	Thomas-Smith Ck.
C2:	M.Fk. Owyhee River
C3:	Pole Creek
C4a:	Squaw Creek (N.Fk. tributary)
Segment S8b:	Stoneman Ck.
Segment S1a & c:	S.Fk. Owyhee River tributaries*
Segment S3d:	Porcupine Creek*

* These segments were evaluated, and found non-eligible, as part of the East Fork and South Fork Owyhee River determinations (see final eligibility documentation for East Fork and South Fork).

Recommendation

The Owyhee Resource Area and Boise District Staff, after inventory and review of all streams and rivers in the resource area, recommend that 998.5 miles are non-eligible for further consideration as wild, scenic, or recreational rivers, and should not receive further study under the Owyhee RMP. The non-eligible segments include those described in this document (105.75 miles) and those found to be preliminarily non-eligible (892.75 miles) in the April 25, 1991, listing.

Recommended By:

/s/ John R. Benedict	1/27/92
Owyhee Recreation Planner	Date
/s/ J.C. Harksen	2/7/92
Owyhee Geologist	Date
/s/ J.M. Young	2/4/92
Owyhee Archaeologist	Date
/s/ Mike J. Mathis	2/7/92
Owyhee Wildlife Biologist	Date
/s/ Pat Kane	2/7/92
Owyhee Range Conservationist	Date
/s/ Patrick Olmstead	2/6/92
Boise District Fisheries Biologist	Date

Reynolds Creek
Segment N5

I. Physical Description

1. Location: From immediately below the ARS weir in the NE4SE4, Section 12, T. 2 S., R. 4 W., downstream to the southern boundary of private property in the N2NW4, Section 22, T. 1 S., R. 3 W.

2. Length - (preliminarily eligible only): 6.5 miles

3. Affected Non-federal Land: None

4. Landscape Characteristics

This segment begins with Reynolds Creek flowing northeastward through an ARS concrete weir about one-quarter mile below the confluence of Reynolds Creek and Salmon Creek. The weir marks the beginning of Reynolds Creek Canyon formed by the slopes of Wilson Peak and the erosion of an adjacent rhyolite bench (small tableland). Wilson Peak rises westward with steep, sagebrush-grassland covered slopes to an elevation of over 2,200 feet above the stream channel. The bench lying east of the creek has been eroded into sheer, 400-foot high rhyolite cliffs which rest atop talus slopes of 1,000 vertical feet. As the stream meanders northward, the benchlands slope downward, retaining over 400-foot cliffs, but gradually loosing the underlying talus slopes, until about mile-5 where only the cliffs remain. At mile-5.5, the stream cuts through the bench to form a narrow gorge with 400 to 600-foot vertical wall on both sides of the stream. This gorge lasts for about .75 miles before the bench abruptly ends; making a 600-foot wall of rhyolite facing northward to the Snake River peneplain. About one-half mile west of the creek, the bench is absorbed into the slopes of Wilson Peak's lower northwest flank. In the lower elevations of the upper canyon, underlying granitic rock is exposed to create a landscape of whitish boulder heaps or mounds along both sides of the creek that contrast sharply with the surrounding reddish rhyolite formations and talus slopes.

The entire length of the stream segment is lined with a relatively dense riparian community of willow, dogwood, chokecherry, hawthorn, current and rose. The riparian area becomes more extensive as it moves downstream until it reaches mile-5.5. At this point, the formation of the gorge reduces bottom land soils and constricts shoreline vegetative growth.

5. Cultural Modifications

As previously discussed, the segment begins immediately below the concrete weir maintained for watershed research purposes by the ARS. This weir is accessed by a dirt road extending downstream from private property located at and above the Salmon Creek confluence. Below the weir, the stream channel is largely free of cultural modifications until it reaches the gorge. Within the gorge, a historic irrigation diversion canal lies along both sides of the creek until downstream of the segment. The canal system is made of hand-laid rock walls and includes a short tunnel associated with the west-side canal. The segment ends at private property denoted by a livestock fence crossing the creek and a dirt road extending down a side draw to the east-side canal. Other minor cultural modifications include several fencelines running down the talus slopes in the upper reaches of the canyon and a major livestock trail entering the canyon from the west just upstream of the gorge. Some blasting of a rock shelf at mid-elevation in the canyon has occurred to allow easier livestock passage. This trail connects with a steep jeep trail. This trail is part of a network of old dirt roads and jeep trails that traverse the east flank of Wilson Peak at a distance of more than one-half mile from the stream channel. Some of the routes access mining prospects carved into the side of the mountain. A network of dirt roads also exists on the eastern bench; some extending to the rimrock.

6. Existing Land Management Designations

The stream river segment lies within the Hardtrigger Wild Horse Herd Area as established by the Wild Horse and Burro Act of 1971 (P.L. 92-195). It also lies within the Owyhee Front Special Recreation Management Area designated for the intensive management of off-highway vehicle use.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the entire region of the Owyhee Mountain Range as having Class B scenic quality. This assessment is consistent with scenic evaluations conducted for other river and stream corridors during the wilderness inventory. However, it should be noted that a small area of Class A scenic quality occurs in the area of the gorge. The overall scenic character of Squaw Creek Canyon is that of high-Class B quality.

The scenic landscape of Reynolds Creek Canyon is dominated by long, diagonal lines that frame triangular forms associated with the slopes of Wilson Peak and the benchland talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities, and medium-textured reddish colored rhyolite rubble fields. Lying above the benchland talus slopes are subordinate vertical lines and forms of coarse-textured, reddish brown eroded cliffs often glazed with yellow to light green microflora. In one notable area (the gorge) vertical landforms dominate and the visual influence of slopes disappears. Throughout the entire canyon system, medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of fast moving brownish, silt laden water with some riffles and boulders. During the summer, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create a scenic landscape. From a scarcity standpoint, the V-shaped canyon of sagebrush-grasslands and rhyolite geology is not unique to southwest Idaho river or stream canyons. The scenic quality of Reynolds Creek Canyon is comparable to that found along other major drainages throughout the Owyhee Mountain Range. They are less scenic than the major river canyon systems found in the southern half of the Owyhee Resource Area on what is known as the Owyhee Uplands.

Conclusion:

The Reynolds Creek segment offers a landscape of diverse landforms, vegetation, and water that possesses good scenic qualities. However, these qualities are not considered to be outstandingly remarkable.

2. Recreation Values

The Reynolds Creek segment offers backpacking or day-hiking opportunities during the spring and fall months. The fall season also brings hunting opportunities. Current recreational use is low, and is expected to remain relatively low. The canyon's scenic qualities and opportunities for camping, wildlife viewing, photography, and fishing are expected to attract use only from the geographical area (southwest Idaho) and not from the Pacific Northwest (PNW) region. It should be noted that Reynolds Creek Canyon is one of the more popular recreation destination areas for the regional population of southwest Idaho.

The Reynolds Creek segment does not contain sufficient flows and appropriate channel structure to allow boating opportunities.

Conclusion:

Hiking and backpacking opportunities along Reynolds Creek are judged to be a significant recreational resource. However, these opportunities are not considered to be outstandingly remarkable for southwest Idaho as a whole.

3. Geologic Values

Like many of the canyons of southwest Idaho, Reynolds Creek has geologic formations predominately of volcanic origin (Miocene). The canyon exposes over 1,400 vertical feet of rhyolitic welded tufts and tuffaceous sediments. Ongoing weathering and erosion have carved some sculptured monolithic cliffs from the rhyolite. The cutting of the canyon has also exposed underlying granitic rock from the Idaho batholith. The weathering of granitic joint systems has produced "breadloaf" formations.

The geologic features carved by Reynolds Creek are significant features of its canyon, but they are not unique to southwest Idaho. Examples of similar rhyolite features are found throughout the Owyhee Mountain Range, Owyhee Canyonlands system, and the Bruneau-Jarbidge River system. The canyon systems have rhyolite in much greater abundance, size, and diversity that those of Squaw Creek Canyon. The granitic "breadloaf" features are common throughout the Owyhee Mountain Range. Larger, more extensive formation exist from the upper West Rabbit Creek area to the New York Summit area (Jordan Creek drainage).

Conclusion:

The geologic features of the Reynolds Creek segment are considered to be significant resource values. However, they are not judged to be outstandingly remarkable geologic values for southwest Idaho as a whole.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified two species of fish in the Reynolds Creek segment, including speckled dace and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Reynolds Creek segment is presently judged to be in unsatisfactory (fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). There are, however, stretches of stream on both ends of the segment which are in good condition. This condition occurs because of the presence of relatively large, deep pools and stable streambanks with adequate cover. Efforts are underway along the Reynolds Creek drainage and its headwater streams to further improve habitat conditions through changes in the grazing practices.

Most streams in southwest Idaho suffer from similar fisheries habitat degradation to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, which streams have the potential to have outstanding fisheries values? An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that the Reynolds Creek segment has potential as an outstanding fishery. The segment is already close to having an outstanding rating if a greater proportion of its length can show improvement to good or excellent condition. Fish population numbers and sizes could be superior to the average resource area stream because of the channel structure (pooling) of the creek.

Conclusion:

The Reynolds Creek segment presently has significant fisheries values. However, the values are not considered outstandingly remarkable. Anticipated improvements in habitat conditions are expected to produce outstandingly remarkable fisheries values.

5. Wildlife Values

The Reynolds Creek segment provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, small ground mammals, reptiles, a host of small birds, raptors, bats, occasional California bighorn sheep, and possibly the Preble's shrew. Habitat conditions are currently rated as unsatisfactory (fair); see Owyhee MSA.

The high, well fractured and otherwise eroded cliffs of the canyons are habitat for cliff nesting raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) occasionally inhabit the canyon, migrating from established populations around the Owyhee Reservoir of Oregon.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams, and shrub steep habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States. Reynolds Creek Canyon is similar to a number of major V-shaped drainages flowing northward from the Owyhee Mountain Range, each of which is considered to be of comparable habitat value; but none of which are as outstanding as those of the massive, vertical-walled canyon systems that network across the Owyhee Uplands in the southern half of the Owyhee Resource Area.

Conclusion:

The Reynolds Creek segment has significant local (Owyhee Mountain Range) wildlife values. However, these values are not considered to be outstandingly remarkable for southwest Idaho as a whole.

6. Prehistoric Cultural Values

A cultural resource inventory of the Reynolds Creek segment has not been completed. A number of archaeological sites have been identified in the Owyhee Mountain Range. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridor of Reynolds Creek may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion.

The presence of outstandingly remarkable prehistoric cultural values along the Reynolds Creek segment cannot be determined at this time.

7. Historic Cultural Values

There are no known historic sites within the Reynolds Creek segment.

Conclusion:

The Reynolds Creek segment does not contain any known historic resources of outstandingly remarkable value.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Reynolds Creek segment.

III. Eligibility and Classification

The free-flowing 6.5 miles of the Reynolds Creek segment are not eligible for further consideration as a congressionally designated river because of a lack of outstandingly remarkable values. The segment does have potential for outstandingly remarkable fisheries values with improvement in habitat conditions. If improvement occurs, the stream should be reconsidered for wild river eligibility at a future date. Without at least one other existing outstandingly remarkable value, the segment should not be identified as eligible at this time.

Classification Considerations for the Owyhee RMP:

None.

Squaw Creek
Segment N7

I. Physical Description

1. Location: From east private property boundary in NW4, Section 30, T. 1 N., R. 4 W., downstream to mouth of canyon at southwest corner of private property in the E2NE4, Section 8, T. 1 N., R. 4 W.

2. Length - (preliminarily eligible only): 3.0 miles

3. Affected Non-federal Lands: None. However, private property at both ends of the stream corridor makes public access difficult.

4. Landscape Characteristics

This segment begins with Squaw Creek flowing northeastward off of private property (developed ranch site) located in a small basin between French John Hill and Buck Mountain. Interstate Highway 95 lies just west of the stream corridor. The recent (1980s) realignment of the highway has left an abandoned roadbed carved into the upper cliffs of Squaw Creek Canyon at an elevation of about 400 feet above the stream channel. Some portion of the roadcut is visible from nearly the entire stream segment, except in the lowest reaches of the "narrows" at the north (downstream) end of the canyon.

The topography surrounding Squaw Creek if typical of the deeper drainages found along the northern flank of the Owyhee Mountain Range where steep, sagebrush-grassland slopes define a V-shaped canyon which on occasion is constricted into vertical walls of rhyolite. In the case of Squaw Creek, the constriction occurs at the downstream end of the canyon at two locations. Each of the "narrows" is just over one-quarter mile long and spaced about one-quarter mile apart. At the south (upstream) end of the corridor, the lower and middle elevations of the canyon are defined by five small buttes. The western, upper elevations of the canyon are predominately that of sheer-wall, rhyolite rock. To the east, the upper canyon elevations merge with a mountainous landscape.

Along the stream channel can be found a relatively dense, shrubby riparian community of willow, dogwood, chokecherry, current and rose.

5. Cultural Modifications

As previously discussed, much of the corridor is affected by the abandoned Highway 95 roadbed. The unmaintained roadbed is still passable and presently used for occasional administrative access and for off-highway vehicle recreation. Other cultural modifications include a livestock fence stretching across the canyon at mile-.25, a jeep trail extending toward the stream from the old highway cut at about mile-.75, several fencelines reaching to the upper rimrock areas of the canyon from both the east and west, and the wreckage of a number of autos and trucks which met their fate by plummeting off the old Highway 95.

6. Existing Land Management Designations

The stream river segment lies within the Hardtrigger Wild Horse Herd Area as established by the Wild Horse and Burro Act of 1971 (P.L. 92-195).

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the entire region of the Owyhee Mountain Range as having Class B scenic quality. This assessment is consistent with scenic evaluations conducted for other river and stream corridors during the wilderness inventory. However, it should be noted that a small area of Class A scenic quality occurs in the area of the "narrows." The overall scenic character of Squaw Creek Canyon is that of Class B quality.

The scenic landscape of Squaw Creek Canyon is dominated by long, diagonal lines that frame triangular forms associated with talus slopes. The slopes have a mosaic of medium-textured, yellow and subdued green sagebrush-bunchgrass communities and medium-textured reddish colored rhyolite rubble fields. Intermixed with the talus slopes are subordinate vertical lines and forms of coarse-textured, reddish brown eroded cliffs often glazed with yellow to light green microflora. In two notable areas, vertical landforms dominate: at the "narrows" and in the upper elevations of the canyon's west wall. In the upper wall, however, the natural features are significantly marred by the old Highway 95 roadcut. The remnants of vehicles scattered along the lower slopes below the old highway also diminish scenic values. Throughout the entire canyon system, medium-textured, rich green riparian vegetation follows the meandering line of a spring time river channel of fast moving brownish, silt laden water with some riffles and boulders. During the early summer, sparkling pools and slow moving water tinted with green and brown channel colors reflect blue sky and a blend of forms, colors, and lines from surrounding cliffs and steep slopes. By late summer, surface water may disappear; somewhat diminishing scenic quality. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create a scenic landscape. From a scarcity standpoint, the V-shaped canyon of sagebrush-grasslands and rhyolite geology is not unique to southwest Idaho river or stream canyons. The scenic quality of Squaw Creek Canyon is comparable to that found along other major drainages throughout the Owyhee Mountain Range. They are less scenic than the major river canyon systems found in the southern half of the Owyhee Resource Area on what is known as the Owyhee Uplands.

Conclusion:

The Squaw Creek segment offers a landscape of diverse landforms, vegetation, and water that possesses good scenic qualities. However, these qualities are not considered to be outstandingly remarkable. The scenic quality of the canyon is somewhat diminished by cultural modifications that cannot be rehabilitated.

2. Recreational Values

The Squaw Creek segment offers backpacking or day-hiking opportunities during the spring and fall mouths. The fall season also brings hunting opportunities. Current recreational use is low, and is expected to remain relatively low. The canyons' scenic qualities and opportunities for camping, wildlife viewing, and photography are expected to attract some use of the stream corridor, but only from the geographical area (southwest Idaho) and not from the Pacific Northwest (PNW) region. Public access to the canyon can be difficult because of topography and private land ownership. Most (tourists) enjoy the canyon from scenic vistas along Highway 95. It has been suggested that the old Highway 95 roadbed be re-opened as a scenic drive. The road lies outside the one-half mile wide stream corridor.

The Squaw Creek segment does not contain sufficient flows and appropriate channel structure to allow boating opportunities.

Conclusion:

Hiking and backpacking opportunities along Squaw Creek are judged not to be a significant recreational resource. These opportunities are not considered to be outstandingly remarkable for southwest Idaho as a whole.

3. Geologic Values

Like many of the canyons of southwest Idaho, Squaw Creek has geologic formations predominately of volcanic origin (Miocene). The canyon exposes 600 vertical feet of rhyolitic welded tufts and tuffaceous sediments. Ongoing weathering and erosion have carved some sculptured monolithic cliffs from the rhyolite.

The geologic features carved by Squaw Creek are notable features of its canyon, but they are not unique to southwest Idaho. Examples of similar geologic features are found throughout the Owyhee Mountain Range, Owyhee Canyonlands system, and the Bruneau-Jarbidge River system. The canyon systems have rhyolite in much greater abundance, size, and diversity than those of Squaw Creek Canyon.

Conclusion:

The geologic features of the Squaw Creek segment are considered to be significant resource values. However, they are not judged to be outstandingly remarkable geologic values for southwest Idaho as a whole.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified two species of fish in the Squaw Creek segment, including sucker and dace.

Fisheries habitat in the Squaw Creek segment is judged to be presently in unsatisfactory (poor to fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway along the Squaw Creek drainage and its headwater streams to improve habitat conditions through changes in grazing practices.

Most streams in southwest Idaho suffer from similar fisheries habitat concerns to varying degrees. Assuming the BLM is successful in improving fisheries habitat throughout the resource area, which streams have the potential to have outstanding fisheries values? An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that the Squaw Creek segment does not have potential as an outstanding fishery. Fish population numbers and sizes would not be superior to the average resource area stream.

Conclusion:

The Squaw Creek segment presently does not have outstanding remarkable fisheries values. Anticipated improvements in habitat conditions are not expected to produce outstandingly remarkable fisheries values.

5. Wildlife Values

The Squaw Creek segment provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, small ground mammals, reptiles, a host of small birds, raptors, bats, occasionally California bighorn sheep, and possible the Preble's shrew. Habitat conditions are currently rated as unsatisfactory (fair); see Owyhee MSA.

The high, well fractured and otherwise eroded cliffs of the canyons are considered habitat for cliff nesting raptors. Such cliffs are also suspected to support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

California bighorn sheep (sensitive species) occasionally inhabit the canyons, migrating from the population areas around the Owyhee Reservoir of Oregon.

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

Generally, deep canyon habitats are considered significant to wildlife species in desert and semi-desert environments throughout the western United States. Squaw Creek Canyon is similar to a number of major V-shaped drainages flowing northward from the Owyhee Mountain Range, each of which is considered to be of comparable habitat value; but none of which are as outstanding as those of the massive, vertical-walled canyon systems that network across the Owyhee Uplands in the southern half of the Owyhee Resource Area.

Conclusion:

The Squaw Creek segment has significant local (Owyhee Mountain Range) wildlife values. However, these values are not considered to be outstandingly remarkable for southwest Idaho as a whole.

6. Prehistoric Cultural Values

A cultural resource inventory of the Squaw Creek segment has not been completed. A number of archaeological sites have been identified in the Owyhee Mountain Range. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridor of Squaw Creek may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable prehistoric cultural values along the Squaw Creek segment cannot be determined at this time.

7. Historic Cultural Values

There are no known historic sites within the Squaw Creek segment.

Conclusion:

The Squaw Creek segment does not contain any known historic resources of outstandingly remarkable value.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Squaw Creek segment.

III. Eligibility and Classification

The free-flowing 3.0 miles of the Squaw Creek segment are not eligible for further consideration as a congressionally designated river because of a lack of outstandingly remarkable values.

Classification Considerations for the Owyhee RMP:

None.

Juniper Mountain Streams
Segments S5b, S6b, S7c, C2, C3, and C4a

I. Physical Description

1. Location

   a. E. and W. Forks of Red Canyon Creek: Headwaters downstream to crossing of Bull Basin dirt road.

   b. Upper Petes Creek: Headwaters downstream to crossing of Bull Basin dirt road.

   c. Thomas-Smith Creek: Headwaters downstream to confluence with Nickel Creek.

   d. M. Fk. Owyhee River: Headwaters downstream to Oregon stateline.

   e. Pole Creek: Headwaters downstream to Oregon stateline.

   f. Squaw Creek: Headwaters downstream to Oregon stateline.

2. Length (preliminary eligible only):

a. E. & W. Fk. Red Cyn. Ck.:	16.0 miles
b. Upper Petes Ck:	11.5 miles
c. Thomas-Smith Ck.:	23.0 miles
d. M. Fk. Owyhee River:	19.5 miles

e. Pole Creek:	6.0 miles
f. Squaw Creek:	13.5 miles
Total	89.5 miles

3. Affected Non-federal Lands:

Private:

Upper Petes Ck. (Cow Ck.) corridor: 40 acres

T. 12 S., R. 5 W., Sec. 26, NE4SW4.

Thomas-Smith Ck. corridor: 920 acres

T. 11 S., R. 4 W., Sec. 5, SW4SW4.

T. 11 S., R. 4 W., Sec. 6, S2NE4, SW4NE4, E2SW4, N2SE4.
Sec. 9, S2NW4, N2SW4, N2SE4.

T. 11 S., R. 4 W., Sec. 10, SE4SE4.
Sec. 11, E2NE4, NE4SW4, N2SE4.
Sec. 12, W2NW4, NE4NW4.

Squaw Creek corridor: 1,240 acres

T. 10 S., R. 5 W., Sec. 18, W2SW4,
Sec. 19, N2NW4, SE4NW4, W2NE4, SE4NE4, NE4SW4, SE4.
Sec. 29, W2W2.
Sec. 30, E2E2.
Sec. 31, NE4NE4.
Sec. 32, W2NW4.

State:

Thomas-Smith Ck. corridor: 240 acres

T. 11 S., R. 5 W., Sec. 16, S2NW4, S2NE4. E2SE4.

4. Landscape Characteristics

This stream segment description covers the six major drainage systems that shed water from Juniper Mountain located in the southern half of the resource area near the Oregon border, just north of the Owyhee River. The streams feed in all directions from the upper elevations of Juniper Mountain to eventually find their way into the Owyhee River via the North, East, and Middle Forks of the Owyhee River.

Juniper Mountain is a volcanic rise located at the southern end of the central rhyolite outcrop area of the Owyhee Resource Area. To the north and northeast, the rhyolite outcrop region extends across the resource area. To the west, south and east, a mantle of basalt partially covers the rhyolite at the base of Juniper Mountain. Originating from springs at the upper elevations of the mountain, each of the six stream complexes has abruptly cut V-shaped canyons into the face of the mountain; creating a series of somewhat paralleling ridges. The ridges are covered with a dense to moderately dense canopy of juniper woodlands intermixed with remanent mountain mahogany, mountain shrub, and sagebrush-grassland communities. The southern ridges sluff long slopes of talus rubble into the canyons of the Red Canyon Creek and Petes Creek systems. In places, the slopes consist largely of rhyolite rubble with only a scattering of juniper and patches of sagebrush-grassland communities. To the north and east side of the mountain, the rhyolite has been eroded into a mosaic of steep, juniper-covered slopes and intermixed rock outcrop escarpments surrounding the Thomas-Smith Creek and Squaw Creek complexes. Isolated benches and slopes of remanent mahogany, shrub and grassland communities exist. In the more sheltered, wetter areas, communities of quaking aspen can be found. As elevations decrease, the Squaw Creek drainage cuts a narrow gorge into the relatively flat basaltic mantle; the Thomas-Smith Creek drainages enter into narrow, shallow chasms of rhyolite that cut across a gently rolling plateau landscape; the landscape of both drainage systems becoming more influenced by sagebrush-grassland communities possessing only a scattering of juniper. To the west, the V-shaped canyons of the Middle Fork Owyhee River and Pole Creek complexes quickly turn into sheer-walled gorges of rhyolite rock monoliths with some areas of rock spires (hoodoo formations). Juniper occupies the canyon rimrocks and extends outward across broad, relatively flat ridges; decreasing in size and number until expanses of sagebrush-grassland communities eventually dominate the landscape at lower elevations. Along each of the stream channels is a ribbon of juniper and riparian vegetation, including willow, chokecherry, aspen, dogwood, alder, rose, current, sedges, and grasses.

5. Cultural Modifications

Cultural modifications affecting the stream channels include a scattering of dirt roads which cross the channels. The Thomas-Smith Creek and Squaw Creek drainages are most affected by roads due in part to the prevalence of affected private lands. Some of the private lands include irrigated meadowlands that draw water from the creeks using small rock check dams and earthen canals. Fences are customarily associated with the meadowland developments. The most severely affected stream segment is that of the middle portion of Squaw Creek where an active ranch site exists. This portion of Squaw Creek was found to be non-eligible during the preliminary eligibility inventory. In the case of the other stream segments, the roads generally define the beginning or end of a segment. Some isolated fencelines also affect the streams of

Juniper Mountain. A number of the spring heads from which the streams emerge have been developed.

6. Existing Land Management Designations

All but the lowermost reaches of Squaw Creek, much of the East Fork Red Canyon Creek, and the entire length of the Thomas-Smith Creek system lie within a series of four (4) wilderness study areas (WSAs) that cover the north, west and south sides of Juniper Mountain. The WSAs include Squaw Creek Canyon WSA, Big Willow Spring WSA, M. Fk. Owyhee River WSA, and West Fork Red Canyon WSA.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality assessment completed for the Owyhee Grazing EIS identified the geographical area on and immediately around Juniper Mountain as having Class B scenic quality. This assessment is not consistent with the scenic evaluations conducted during the wilderness inventory process (see Wilderness Scenic Quality Inventory and Evaluation Form). The wilderness scenic evaluations determined that the lower portions of Squaw Creek, Pole Creek and M. Fk. Owyhee River canyons possess low-Class A scenic quality because of the prominence of vertical landforms. These short sections of canyon are of equal scenic quality to those of longer, larger, vertical-walled canyons in other WSAs that have been rated as having Class A quality. The great majority of the canyon landscapes of Juniper Mountain are of Class B scenic quality. The Grazing EIS assessment for visual resources was based on large landform areas rather than on small canyon landscapes.

The canyon systems of the Juniper Mountain stream segments are generally dominated by the triangular forms and prominent diagonal lines associated with 1) talus slopes that frame medium-textured mosaics of yellow and subdued green sagebrush-bunchgrass communities, dark green juniper stands and reddish rubble fields all of which have a scattering of indistinctive subordinate lines, or 2) slopes covered with dense stands of dark green juniper woodlands of indistinctive lines intermixed with subordinate vertical lines and forms of course-textured, brownish, diversely eroded rock escarpments that are often glazed with yellow to light green microflora. Along the stream channels are meandering lines of rich green, medium-textured riparian vegetation that frames sparkling pools and slow to fast moving water tinted with green and brown channel colors. Blue sky and a blend of forms, colors, and lines from surrounding cliffs and slopes reflect from the pools. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create scenic landscapes of good quality. Along the limited number of stream miles, where the vertical lines and forms associated with rock monoliths dominate the landscape in proximity of the stream channels, the scenic quality is rated as exceptional. From a scarcity standpoint, the juniper/rhyolite rock outcrop country is widespread over the central portion of the Owyhee

Resource Area. The most scenic portions of this geographical area are associated with the vertical-walled canyons rather than with the V-shaped topography typical of Juniper Mountain. While the vertical-walled canyons found on the lower Pole Creek, Squaw Creek, and M. Fk. Owyhee River are as scenic as any in the Owyhee Resource Area, the amount of Class A scenic quality on these river segments in limited. There are a number of Class A scenic canyons identified in the resource area which are much longer and of greater size. Therefore, those of Juniper Mountain are not considered outstanding.

Conclusion:

The scenic resources of the Juniper Mountain stream segments are considered to be of significant value, but they are not judged to be outstandingly remarkable for southwest Idaho as a whole.

2. Recreational Values

The stream segments of Juniper Mountain are recognized as contributing factors to the overall outstanding primitive recreation opportunities identified for the Juniper Mountain WSAs. Taken individually, however, none have landscapes or recreational opportunities that would attract visitors from outside the local geographical area of southwest Idaho. The streams do provide opportunities for hiking/backpacking and associated secondary activities such as nature study, wildlife viewing, photography and fishing. The stream corridors also attract visitors for fall hunting activities. There are a number of much larger canyon systems found in association with the Owyhee River system which provide higher quality experiences and do attract visitors from the Pacific Northwest, California, and the Intermountain Region.

Water flows and channel characteristics prohibit whitewater boating opportunities on all the Juniper Mountain streams.

Conclusion:

The Juniper Mountain stream segments taken individually are lacking in outstandingly remarkable values. Taken collectively the streams contribute significantly to primitive recreation values in the Juniper Mountain WSAs.

3. Geologic Values

The Juniper Mountain stream segments have geologic formations of volcanic origin (Miocene). The canyon systems generally expose in excess of 400 vertical feet of rhyolitic welded tufts and tuffaceous sediments partially capped in places (lower Squaw Creek) with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured monolithic cliff walls from the rhyolite, including some areas of “hoodoos” or rock pinnacles (Pole Creek mostly).

The geologic features carved by the Juniper Mountain stream segments are typical of those found throughout the Owyhee Resource Area. The geologic features found in other river/stream segments, such as those associated with the canyon complexes of the Owyhee River system and the Bruneau-Jarbidge River system are more extensive and of larger scale.

Conclusion:

The geologic features of the Juniper Mountain stream segments are not judged to be of outstandingly remarkable value.

4. Fisheries Values

Fisheries inventories conducted for the Owyhee MFP identified four species of fish in the Juniper Mountain stream segments, including suckers, dace, sculpins, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitats in the Juniper Mountain stream segments are judged to be presently in unsatisfactory (poor to fair) condition overall because of stream siltation, low summer flows, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway to improve habitat conditions through changes in grazing practices throughout the Juniper Mountain area.

Most streams in southwest Idaho suffer from similar fisheries habitat concerns to varying degrees. Assuming the BLM is successful in improving fisheries habitat conditions throughout the resource area, which streams have the potential to outstanding fisheries values? The mere presence of redband trout in an resource area stream does not justify an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that none of the Juniper Mountain streams have potential as outstanding fisheries. Though habitat improvements are expected, these streams would not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

The Juniper Mountain stream segments do not have, nor are expected to have, outstandingly remarkable fisheries values.

5. Wildlife Values

The Juniper Mountain stream segments provide upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, beaver, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly the Preble's shrew. Habitat conditions are currently rated at unsatisfactory (fair to poor); see Owyhee MSA.

The well fractured and otherwise eroded cliffs of the canyon are considered habitat for cliff nesting raptors. Such cliffs could also support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

The Juniper Mountain stream segments contain a diversity of riparian and upland vegetation species; thereby supporting diverse wildlife populations. Similar conditions exist in many stream corridors of the rhyolite rock outcrop country within the mid-resource area geographical area. Generally, the deeper, enclosed canyon habitats are considered more significant to wildlife species in desert and semi-desert environments throughout the western United States than the more open, V-shaped landscapes that surround most of the Juniper Mountain stream segments. Those with vertical relief are relatively small compared to the main drainages of the nearby Owyhee Canyonlands complex. While the stream corridors of Juniper Mountain are considered significant to the overall diversity of habitats found on the mountain, they are not considered of outstandingly remarkable value.

Conclusion:

The Juniper Mountain stream segments do not possess outstandingly remarkable wildlife values.

6. Prehistoric Cultural Values:

A cultural resource inventory of the Juniper Mountain area has not been completed. However, a number of archaeological sites have been identified in the area. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridors of Juniper Mountain may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable cultural values along the stream corridors of Juniper Mountain cannot be determined at this time.

7. Historic Cultural Values

No known historic sites exist on public lands within the Juniper Mountain stream corridors. However, cabin characteristic of those built in the late-19th and early-20th centuries are located on private lands along some of the stream corridors. A full inventory has not been done. What sites are available are typical of many sites found on both public and private lands throughout southwest Idaho. A judgement cannot be made as to whether any site is eligible for the National Register of Historic Places (NRHP) based upon its individual significance. However, taken collectively with other sites scattered throughout the Owyhee Canyonlands region, they would probably qualify for inclusion on the NRHP as contributing elements of a Historic Site District centered around early ranching within the various tributaries of the Owyhee River.

Conclusion:

No historic resources of outstandingly remarkable value exist with the Juniper Mountain stream segments.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Juniper Mountain stream segments.

III. Eligibility and Classification

The 89.5 miles of streams on Juniper Mountain are not eligible for further consideration as congressionally designated rivers because of a lack of outstandingly remarkable values.

Classification Considerations for the Owyhee RMP:

None.

Stoneman Creek

Segment S8b

I. Physical Description

1. Location: From east boundary of private property in the NE4SE4, Section 12, T. 10 S., R. 4 W., downstream to confluence with Current Creek.

2. Length (preliminary eligible only): 2.0 miles

3. Affected Non-federal Lands: None. Private lands near confluence with Current Creek identified in Current Creek documentation.

4. Landscape Characteristics

Stoneman Creek flows from a relatively large spring on public lands just south of private property in the SE4 of Section 12 at the base of the northern wall of the Owyhee Canyonlands plateau. This wall can be viewed from the nearby Owyhee Uplands National Back Country Byway. The segment begins when the stream flows eastward from the private properties parallel to the Byway. The stream remains at the base of the talus slopes formed from the plateau's rhyolite wall until it reaches its confluence with Current Creek. The Byway remains within one-quarter mile of the stream channel.

The stream channel is lined with a relatively dense riparian community comprised of willow, chokecherry, aspen, dogwood, alder, rose, current, sedges, and grasses. The middle portion of the segment, where it comes in close contact to the Byway, the riparian area is customarily flooded by active beaver dams. To the north of the Byway is a broad, hilly basin area. The basin is flanked on the west by the basaltic rimrocks and rubble slopes that form Nickel Table. On the slopes of both Nickel Table and the Owyhee Canyonlands plateau wall is a woodland community of juniper. On the more sheltered, north facing plateau wall, juniper is associated with stands of mountain shrubs, mountain mahogany and quaking aspen.

5. Cultural Modifications

As previously discussed, the stream segment is paralleled by the Owyhee Uplands National Back Country Byway: a 1 lane, maintained gravel road. As the stream approaches within about one-quarter mile of Current Creek it enters private property affected by hay meadows and the customary fencing, as well as an old cabin site located south of Current Creek just downstream of the Stoneman Creek confluence (see segment S8a). The private property at the upper end of the segment is undeveloped.

6. Existing Land Management Designations

The entire length of the stream segment is within the Owyhee Uplands Byway management corridor. The Byway defines the North Fork Owyhee River Wilderness Study Area (WSA) to the north. The Deep Creek Special Recreation Management Area (SRMA) affects the adjacent Deep Creek-Current Creek confluence. None of the Stoneman Creek segment is within the WSA or SRMA.

II. Assessment of Outstandingly Remarkable Values

1. Scenic Values

The scenic quality inventory completed for the Owyhee Grazing EIS identified the basin area surrounding the Stoneman Creek corridor as having Class B scenic quality. This assessment is consistent with scenic evaluations conducted for the wilderness inventory.

The landscape of Stoneman Creek is dominated by the lines, forms, colors and textures of the adjacent Owyhee Canyonlands plateau wall, as well as the nearby face of Nickel Table. These features are a mixture of both vertical lines and forms of course-textured, brownish to black, diversely eroded cliffs, often glazed with yellow to light green microflora, and underlying triangular forms and diagonal lines associated with talus slopes that frame medium-textured, yellow and subdued green sagebrush-bunchgrass communities and dark green juniper/ mountain mahogany woodland communities, all of which have a scattering of indistinctive lines. Medium-textured, rich green riparian vegetation follows the meandering line of sparkling pools and slow to fast moving water tinted with green and brown channel colors. Blue sky and a blend of forms, colors, and lines from surrounding cliffs and slopes reflect from the pools. The combination of lines, forms, colors, and textures found amidst this close association of landforms, water, and vegetation create a scenic landscape. From a scarcity standpoint, the rhyolite rock/juniper woodland association is common throughout the middle of the Owyhee Resource Area. The deep, narrow canyons of the mid-resource area region, such as those of nearby Current and Deep Creek, represent the best of the scenic rhyolite rock outcrop geographic area. The Stoneman Creek corridor can only be described as of "average" scenic quality.

Conclusion:

The scenic values of the Stoneman Creek segment are recognized as a significant resource, but they are not judged to be outstandingly remarkable for the resource area as a whole.

2. Recreational Values

The Stoneman Creek corridor parallels the Owyhee Uplands National Back Country Byway. The Byway is recognized as one the more scenic drives in the Intermountain Basin and is expected to attract a lot of recreation use (driving for pleasure and sightseeing activities) on a local, regional and national basis. Because of its proximity and orientation to the Byway roadbed, Stoneman Creek offers opportunities for the interpretation of riparian and wildlife values. Such interpretation would contribute significantly to the recreation experience on the Byway. A number of other streams associated with the Byway can and will also be used for interpretation, as well as a number of upland sites.

Water flows and channel characteristics make whitewater prevent boating opportunities. Casual, short-term day-hiking use can be expected in association with interpretive stops. The corridor is not well suitable for camping on public lands.

Conclusion:

The Stoneman Creek segment contributes to the overall recreational experience (driving for pleasure) found along the Owyhee Uplands National Back Country Byway. By itself, the segment does not contain outstandingly remarkable recreation values.

3. Geologic Values

The Stoneman Creek segment has geological features predominantly of volcanic origin (Miocene). The Owyhee Canyonlands plateau wall and the face of Nickel Table expose up to 600 vertical feet of rhyolitic welded tufts and tuffaceous sediments partially capped in one area (Nickel Table) with a thin mantle of basaltic flows. Ongoing weathering and erosion have carved a myriad of sculptured cliff walls.

The geologic features associated with the Stoneman Creek corridor are typical of those found throughout the rhyolite rock outcrop country covering the entire mid-resource area geographical region.

Conclusion:

The geologic features of Stoneman Creek are not of outstandingly remarkable value.

4. Fisheries Values

No fisheries inventories have been conducted along the Stoneman Creek segment. It is suspected that the stream contains dace, sucker, shiner, sculpin, and redband trout. The redband trout is designated a Category 2 federal candidate species under the Endangered Species Act.

Fisheries habitat in the Stoneman Creek segment is judged to be presently in unsatisfactory (fair) condition overall because of stream siltation, high water temperatures, and the lack of cover (Owyhee MSA). Efforts are underway to improve habitat conditions through changes in grazing practices along the creek.

Most streams in southwest Idaho suffer from similar fisheries habitat concerns to varying degrees. Assuming the BLM is successful in improving fisheries habitat conditions throughout the Owyhee Resource Area, which streams have the potential to outstanding fisheries values? The mere presence of redband trout in an resource area stream does not justify an outstanding rating since the species is in most resource area streams. An outstanding rating should occur when a particular stream possesses or has the potential for sufficient flows to produce fish population densities and sizes which would clearly be superior to the average good condition stream. It is judged that Stoneman Creek would not have potential as an outstanding fisheries despite anticipated, cooler temperatures, reduced siltation, and cover factors. Even with such improvements, this stream would not contain flow volumes that could produce fish numbers or sizes notably superior to those of the average resource area stream.

Conclusion:

Stoneman Creek presently do not possess outstandingly remarkable fisheries values. Anticipated improvements in habitat conditions are not expected to produce increases in fish populations and sizes that would result in outstandingly remarkable fisheries values.

5 Wildlife Values

The Stoneman Creek corridor provides both upland and riparian habitats for a number of wildlife species including, mule deer, cougar, bobcat, beaver, muskrat, other small ground mammals, reptiles, a host of small birds, raptors, bats, and possibly the Preble's shrew. Habitat conditions are currently rated at unsatisfactory (fair to poor); see Owyhee MSA.

The high, well fractured and otherwise eroded cliffs of the nearby Owyhee Canyonlands plateau wall and of the Nickel Table face could provide habitat for cliff nesting raptors. Such cliffs could also support populations of spotted bat and/or Townsend's big-eared bat (both Category 2 federal candidate species).

The Preble's shrew (a Category 2 federal candidate species) associated with marshes, streams and shrub steppe habitats in eastern Oregon and western Idaho may also be present.

The Stoneman Creek corridor contains a diversity of riparian and upland vegetation species; thereby supporting diverse wildlife populations. This condition is common to many stream corridors in the rhyolite rock outcrop country of the mid-resource area geographical area. Generally, the deeper, enclosed canyon habitats are considered more significant to wildlife species in desert and semi-desert environments throughout the western United States than the more open plateau/basin landscape around Stoneman Creek. The stream's location in a roaded natural recreation setting along a gravel road receiving ever-increasing recreation use affects the behavior of at least the larger species, such as mule deer, bobcat and cougar. These animals are likely to make limited use of the corridor because of vehicle traffic. The stream is, however, noted for the ongoing presence of beaver activity. Several other streams in the basin area show similar activity in close proximity to the Byway. This area offers excellent opportunities for the interpretation of beaver and their role in riparian/stream ecosystems.

Conclusion:

The Stoneman Creek corridor possesses significant wildlife values, but they are not considered to be outstandingly remarkable for southwest Idaho as a hole.

6. Prehistoric Cultural Values

A cultural resource inventory of Stoneman Creek system has not been completed. However, a number of archaeological sites have been identified in the geographical area. The Cultural Resource Density Predictive Model (Young, 1984) developed for the Boise District Class II Cultural Resource Inventory suggests that the stream corridor of Stoneman Creek may contain significant cultural resource values. Field work to identify additional sites has not been scheduled.

Conclusion:

The presence of outstandingly remarkable cultural values along the Stoneman Creek segment cannot be determined at this time.

7. Historic Cultural Values

No known historic sites exist on public lands within the Stoneman Creek. A cabin site characteristic of those built in the late-19th and early-20th centuries is located on private lands along Current Creek near the Stoneman Creek confluence (see segment S8a).

Conclusion:

No historic resources of outstandingly remarkable value exist with the Stoneman Creek segment.

8. Other Similar Values

No other outstandingly remarkable values are identified for the Current- Corral Creek segment.

III. Eligibility and Classification

The 2.0 miles of Stoneman Creek are not eligible for further consideration as congressionally designated rivers because of a lack of outstandingly remarkable.

Classification Considerations for the Owyhee RMP:

None.

Appendix RECT-5. River Suitability Summary.

Recommendation: It is the recommendation of the interdisciplinary team for the Owyhee Resource Management Plan that 163 miles of the 223 miles of eligible river or stream segments within the Owyhee Resource Area are suitable for designation as components of the National Wild and Scenic Rivers System. This suitability recommendation reflects the management actions described under Alternative C, RECT 3.1. The suitable river/stream segments include those listed below. See Map WSR-1 for locations.

Suitable River/Stream Segments

Segment No.	Segment Name	Segment Miles	Segment Class.
S1a-c	South Fork Owyhee River	28.0 miles	26.5 miles wild 1.5 miles rec.
S3a,b,e,f,g	East Fork Owyhee River (with small tributaries)	78.0 miles	66.0 miles wild 12.0 miles NSR*
S4/S7a	Deep-Nickel Creek	40.0 miles	37.5 miles wild 2.5 miles scenic
S8a	Current-Corral Creek	12.0 miles	7.5 miles wild 1.5 miles scenic 3.0 miles NSR*
C5a	Lower North Fork Owyhee River	4.0 miles	4.0 miles scenic
C5b	Upper North Fork Owyhee River (with small tributaries)	28.5 miles	16.0 miles wild 12.5 miles NSR*

*Note: NSR = Non-suitable recommendation

The evaluation and suitable determination for each of the six segments is attached to this summary document. Also available for each suitable segment is the proposed legal description in both narrative and map form.

The river/stream segments for the Owyhee Resource Area found entirely non-suitable include the following:

S2	East Little Owyhee River	9.5 miles
S5a/S6a	Red Canyon-Petes Creek	7.0 miles
C9	Boulder-Rock Creek	11.5 miles
N8	Jump Creek	4.5 miles

Appendix RECT-5. River Suitability Summary (cont).

The evaluation and non-suitable determination for each of the four river/stream segments is attached to this summary document. No legal description of the non-suitable segment corridors have been prepared.

The cost of managing the various eligible river/stream segments with and/or without a national river designation is shown in the table below:

Cost of BLM Administration

Cost Item	Suitable Designations 1/ (Owyhee River)	Non-suitable Designations 1/ (Owyhee River)	Non-Suitable Designations (Other Rivers)
General Administration			
Permitting (Commercial)	2,500	2,500	0
Registration (Noncomm.) 2/	3,500	3,500	0
River Guide Books/Handouts			
Re-design	5,000 3/	5,000 3/	0
Printing	1,000	1,000	0
Visitor Use Monitoring	5,500	5,500	15,000 4/
Designation Implementation			
Mapping (withdrawal)	2,500 3/	0	0
Publications			
Design	2,500 3/	0	1,800 4/
Printing	5,000	0	200 4/
Signing	10,500 3/	0	2,000 4/
Management Plans			
Preparation	20,500 3/	20,500 3/	0
Printing	8,000 3/	8,000 3/	0
Development			
Site Plans	26,000 3/	20,000 3/	6,000 3/ 4/
Site Construction	150,000 3/	90,000 3/	300,000 3/ 4/
Operation/Maintenance	15,000	9,000	30,000
Total	257,500	165,000	355,000

Appendix RECT-5. River Suitability Summary (cont).

1/ The cost of river management in the Owyhee Resource Area has been determined on a collective basis rather than by individual river/stream segment because all suitable segments will be managed as one river ecosystem (the Owyhee River) under the jurisdiction of one special recreation management area (SRMA) plan. All suitable segments are presently contained within special recreation management area designations and will require activity planning efforts and ongoing administration and some development regardless of National River designation in order to protect river values. It has been previously recommended that the existing Owyhee National Wild River Plan (1993) for Oregon be amended to include those segments of the Owyhee River in Idaho which receive congressional river designation. Other non-suitable river/stream segments outside the Owyhee River system will be managed through separate SRMA/recreation site plans (Jump Creek) or other appropriate resource activity plans.

2/ Includes cost of day-to-day public information contact.

3/ One-time expense; all others are annual costs after year-one.

4/ Includes costs at Jump Creek Recreation Site; assumes full development to mitigate recreation use impacts.

Segment S1: South Fork Owyhee River

S1: South Fork Owyhee River from Nevada stateline downstream to confluence with East Fork Owyhee River: 28 miles:

S1a: Nevada stateline downstream to 45 Diversion Dam impoundment: 17.5 miles.
S1b: 45 Diversion Dam impoundment downstream to mouth of lower canyon: 1.5 miles.
S1c: Mouth of lower canyon to confluence with East Fork Owyhee River (Segment S3a): 9.0 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the river corridor a worthy addition to the National Wild and Scenic Rivers System:

Sub-Segments S1a and S1c are in a highly natural condition and possess outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. Both sub-segments have been previously recommended for wilderness designation. The river corridor consists of a steep to vertical-walled canyon ranging in depth from 550 to 700 feet. As it flows toward its confluence with the East Fork Owyhee River, the corridor (lower canyon) develops into a two-tier canyon landscape where a broad basin (Juniper Basin) is defined by a nearly continuous vertical rimrock of basalt. Cutting a very meandering course through the basin, the South Fork Owyhee River has carved out a 300 to 400-foot sheer wall gorge into underlying rhyolite rock that eventually joins with that of the East Fork gorge to form the “Grand Canyon of the Owyhee River” (see East Fork Owyhee River suitability assessment). Within the inner gorge of the South Fork (both Sub-Segments S1a and S1c) can be found areas of rhyolite pinnacle formations known as “hoodoos.”

Sub-Segment S1b lies between the upper and lower canyons, and contains a broad basin area where the canyon topography has opened up due to the erosional possesses brought about by the joining of the large sister canyon of the East Little Owyhee River. Nestled in the basin along the east shoreline of the South Fork Owyhee River are the private properties of the 45 Ranch with its dirt access roads, fences, hay fields and several buildings occupied on a year-round basis. Adjoining these lands are public lands containing a diversion dam and canal/dirt road along the South Fork just upstream of the ranch site. The 45 Ranch serves as base property for grazing livestock on surrounding public lands. This stretch of river contains outstandingly remarkable recreational, scenic and wildlife values.

Further detail on the characteristics of the South Fork Owyhee River corridor are contained in the eligibility assessment.

2. Current status of landownership and uses within the river corridor:

A. Total acres within corridor: 8,960 acres (average 320 acres per river mile):

BLM-administered: 8,560 acres
Private ownership: 400 acres (two parcels)
State ownership: none

There is 6.3% of the river segment's length in private property. Of the acreage contained in the river corridor, only 4.5% involves private property. No State lands are contained within the river corridor.

3. Current management situation:

Both Sub-Segments S1a and S1b are located within the Owyhee River Canyon WSA ID-16-48B and South Fork Owyhee River WSA ID-16-53 which are being managed under the BLM Wilderness IMP. The entire river corridor is also contained within the existing Owyhee River Bighorn Sheep ACEC and the Owyhee Canyonlands SRMA. The upper and lower canyons of the river corridor lie mostly within a VRM Class I area that will have mostly a "closed" off-highway vehicle designation; where the protection of primitive recreation settings is a management objective. The lands adjoining the access road into Coyote Hole in Sub-Segment S1a is to be managed for VRM Class II and a semi-primitive motorized setting. The 45 Ranch area (Sub-Segment S1b) will have a VRM Class II designation with OHV use limited to existing roads and jeep trails; where the maintenance of semi-primitive motorized recreation setting is a primary management objective.

A. Transportation, facilities and developments

The river corridor is accessible by vehicle at only two locations within Idaho. The southerly access is in Sub-Segment S1c where a primitive dirt road enters the canyon from the east to access the private property at Coyote Hole. Several dirt roads and jeep trails reach to the rimrock of the upper canyon as well, but do not enter the canyonlands. The primary northerly access is at the 45 Ranch and includes a crossing of the South Fork within the private properties at the confluence of the East Little Owyhee River. Several primitive dirt roads extend from the ranch site along both sides of the river below the confluence. Above the confluence, a dirt road services the diversion canal on the north side of the river. A couple of jeep trails that lie north of the 45 Ranch area traverse the upper elevations of Juniper Basin (west side) in the lower canyon area but do not enter the proposed corridor boundary.

Coyote Hole has historic ruins of a stone building and juniper/willow corral. These ruins are considered of both recreational and cultural value.

The 45 Ranch is a year-round active ranch site comprised of several buildings, hay meadows, fences and dirt road network extending along about 1.25 miles of the river's east and north shoreline. The owner proposed to bridge the South Fork on private property to allow high-water access to the west shoreline. Additional stone building ruins are located upstream of Coyote Hole on public lands at "Bull Camp."

B. Recreation activities and visual quality

Recreation management in the South Fork Canyon is directed by the Owyhee River Special Recreation Management Area (SRMA) Management Plan (1983). The plan established an interim carrying capacity for springtime float boating activities to assure the protection of outstandingly remarkable primitive recreation and wildlife values. Presently, float boat use (both commercial and noncommercial) is at less than 10% of the interim carrying capacity and is expected to remain below this capacity for many years. Associated secondary activities include dispersed primitive camping, hiking, fishing, sightseeing, nature study and photography. Semi-primitive recreation opportunities are enjoyed via the few dirt roads that enter or approach the river corridor. These opportunities include OHV travel, hunting and rock hounding as well as the secondary activities previously mentioned.

The South Fork Canyon has been rated as Class A scenic quality (BLM Handbook H-8410-1). Its outstandingly remarkable scenic quality is attributable to its diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyon contributes significantly to the area's outstandingly remarkable recreational values.

C. Livestock grazing

The South Fork Owyhee River corridor affects portions of three (3) livestock grazing allotments (MIC categories noted):

0629 - "45" (I)
0584 - Garat (I)
0524 - Garat Individual (I)

D. Stream flow/water quality

The South Fork Owyhee River is a perennial water course with flows ranging from just under 100 cfs in late summer to a historic high of about 15,000 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the river corridor's outstandingly remarkable values.

Water quality on the South Fork is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The river corridor is judged to have outstandingly remarkable wildlife values. The canyon as a whole support a large diversity of wildlife species and is critical to the overall ecosystem of southwest Idaho. The habitats of the canyon provide for mules deer (crucial mule deer winter range), cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and a large population of California bighorn sheep. The California bighorn sheep habitat of the South Fork is considered of national significance. Several of these species, including bighorn, are sensitive or Category 2 federal candidate species.

The waters of the river segment support populations of muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species. The South Fork corridor is recognized as a regionally significant waterfowl nesting area.

B. Vegetation

The canyon of the South Fork is comprised of a sagebrush-bunchgrass vegetation community in generally good to pristine condition, except in the vicinity of the 45 Ranch. In the vicinity of the 45 Ranch vegetative conditions are poor. At the ranch site itself, irrigated hay meadows are the predominate vegetation. The South Fork Canyon has no woodland or timber resources other than a few widely scattered juniper trees. A number of special status or sensitive plant species exist within the river corridor.

C. Geology

The South Fork Canyon is predominately Miocene rhyolitic welded tuffs and tuffaceous sediments capped with a thin mantle of basaltic flows. The river has either cut vertically into the rhyolite to form vertical-walled gorges which have areas of numerous pinnacles or hoodoos, or has eroded the overlying basalt into steep talus slopes that bury the rhyolite strata. The hoodoo formations, in combination with other geological formations, give the canyon outstandingly remarkable geologic values of national significance.

D. Cultural resources

The South Fork corridor contains several archaeological sites of historic value, including those at Bull Camp, Coyote Hole, and the 45 Ranch. The historic ruins found on the sites contribute significantly to the overall recreation experience available in the canyon (see Section B.4). Prehistoric sites are also present in association with rock shelters and canyon rimrocks. None of these sites has been individually nominated to the National Register of Historic Places.

E. Wilderness

The South Fork corridor contains most of the features which give the Owyhee River Canyon and South Owyhee River Canyon WSAs their wilderness character. The river canyon is the major attraction in the WSAs: providing both outstanding opportunities for solitude and primitive recreation. The two WSAs have been found to be suitable for wilderness designation.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the river corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. Small warm springs (about 80 degrees F) seep into the river channel, but the river segment is judged to have a low potential for the development of geothermal resources.

B. Water resource development

The river corridor has no site reserve for water power or storage development. The potential for power/irrigation site development is considered low due to the limited supply of water available in the South Fork watershed.

Sub-Segment S1b contains a small diversion dam (T. 14 S., R. 5 W., Sec. 25, SE4SE4) which canals water along the east shoreline of the river to service hay meadows at the 45 Ranch. A State water right and BLM right-of-way exists on the diversion facilities. The dam does not unduly impede navigation on the river during the springtime recreational float season. Low water use requires the lining or portaging of small craft.

C. Aircraft overflights

The South Fork Owyhee River corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the river segment occur on a regular basis, affecting mostly canyonlands near the 45 Ranch. The flights cause a temporary disruption in the canyon's otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the river corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing a targeting site(s) to the east of the South Fork Canyon (Garat plateau) is expected to severely jeopardize the canyon's solitude opportunities by substantially increasing the frequency of aircraft overflights throughout the length of the river segment.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the river segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on protecting existing nonmotorized opportunities through minimal portal facility development at launch sites and through visitor use supervision and compliance. Again, these actions could occur regardless of a national river designation.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the South Fork Owyhee River segment.

7. Public, State, local and Federal interest in the designation of the river corridor:

Interest has been shown by State and Federal agencies, and by local publics for river designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

The BLM would seek recreational and/or scenic easements, or fee title acquisition through exchange or purchase, on the 400 acres of private property. The BLM recognizes the need to support the continued viable operation of the 45 Ranch and its diversion dam right-of-way. The BLM has approached the 45 Ranch owners to establish a boat launch site at the north end of their properties under a recreational easement agreement. The BLM wishes to explore a cooperative agreement with the owners of Coyote Hole for the preservation and eventual restoration of its historic structures even if lands are not acquired.

8. Estimated cost for the administration and development of the river corridor:

   A. Anticipated funding requirements for the South Fork Owyhee River:

      See the River Suitability Summary document for estimates of funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

      Exchanges: none

      Easements: 45 Ranch: $208,000 for scenic/recreational easement.

      Acquisition: Coyote Hole: $1000,000 - willing seller only.

9. Ability of the BLM to manage the river corridor as a National River designation:

The river corridor is geographically isolated within a deep canyon with few vehicle access points. Only two parcels of non-federal land exist within the canyon, both of which are accessed by existing dirt roads. Cooperative management with landowners, including possible easements, can ensure compatible use and/or development of private inholdings. Recreation use at present is very low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequent increased interest in recreation activities along the river corridor. Limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management.

The two vehicle routes into the South Fork Canyon will be maintained for reasonable access, including public access to the 45 Ranch launch site. No new road construction would be allowed in the wild river Sub-Segments S1a and S1c. Reconstruction or realignment of roads in Sub-Segment S1b would be allowed to establish the 45 Ranch launch site and meet the operational needs of the 45 Ranch, including the possible bridging of the South Fork channel and required maintenance of the diversion canal access road. Such management provisions would require a recreational classification.

Recreational development would be minimal. Facilities would be limited to the 45 Ranch launch site (toilet, 2-3 fire grills in a small camping area, small parking area, access road, kiosk/registration box, and other small signing), directional signs on access routes, and warning signs above the 45 Dam. No trail development will occur along the river.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. The right-of-way for the "45" diversion dam will continue. The BLM will negotiate for recreational and scenic easements which would allow for continued historic uses of private inholdings, or will seek fee title acquisition with a willing seller.

11. Other issues and concerns identified in the land use planning process:

A. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the river channel, but any cross-fencing of the river and tributary streams within the defined corridor would be prohibited. (Note: one cross-channel fence presently exists at the north end of the 45 properties which is put in service during low water periods.)

B. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited in the wild designation (Sub-Segment S1a and S1c). Heavy equipment can be approved with discretion in the recreational section (Sub-Segment S1b) to protect life and property at the 45 Ranch.

C. The restoration of cottonwood communities along the South Fork should be given consideration.

D. Military overflights offer the greatest potential for adverse impacts to recreation values within the river corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 28-mile length of the South Fork Owyhee River (Segment S1) is suitable for designation as a component of the National Wild and Scenic Rivers System. There are 26.5 miles (Sub-Segments S1a and S1c) which should be managed under a wild classification. There are 1.5 miles in Sub-Segment S1b which should be managed for a recreational classification. The national river designation would recognize the nationally significant river values of the river segment as being of equal quality to those of river segments already congressionally designated or recommended for designation in the Owyhee River system of Oregon, Idaho and Nevada.

Segment S2: East Little Owyhee River

S2: East Little Owyhee River: From the east end of the Star Valley Ranch properties downstream to the confluence with the South Owyhee River: 9.5 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the river corridor a worthy addition to the National Wild and Scenic Rivers System:

The East Little Owyhee River segment (Segment S2) is recognized as an eligible river only for its outstandingly remarkable wildlife values: these values existing primarily because of the river canyon lies within the California bighorn sheep habitat area of the Owyhee Canyonlands system. The river segment is not recognized as being outstandingly scenic or possessing outstanding recreational values. The East Little Owyhee River cuts a narrow (about one-quarter mile wide) gorge into a high plateau landscape consisting of a basalt mantle and underlying rhyolite rock. The canyon walls at the upper end of the segment reach to a height of 400 feet. In the lower elevations of the gorge the rhyolite rises vertically from within or near the river channel to form highly fractured rock monoliths which take on columnar forms; few, however, have eroded away from the cliffs to form "hoodoos" as is common throughout the Owyhee Canyonlands system. Above the inner gorge, basalt rubble forms steep talus slopes that rise to a nearly continuous, vertical basaltic rimrock. Within the first three miles of the canyon, four relatively large side draws help shape the canyon's topography. Rhyolite cliffs remains a dominant feature at the lower elevations. After mile three, the rhyolite generally becomes submerged beneath a blanket of basaltic rubble as the canyon widens to a about one-half mile. The landscape becomes that of a 700-foot deep, V-shaped, talus sloped canyon capped by a nearly continuous vertical-walled rimrock. The talus slopes are relatively evenly laid and are covered with a mosaic of sagebrush-grassland communities and rock rubble fields which are only occasionally broken by small, vertical-walled outcropping of rhyolite or heaps of basalt rubble. The underlying rhyolite bedrock does not re-emerge from the talus slopes in large amounts until about 1.5 miles upstream of the confluence with the South Fork Owyhee River.

Further detail on the characteristics of the East Little Owyhee River corridor are contained in the eligibility assessment.

2. Current status of landownership and uses within the river corridor:

   A. Total acres within corridor: approximately 3,040 acres (average 320 acres per river mile):

BLM-administered: 2,840 acres
Private ownership: 40 acres (one parcel)
State ownership: 160 acres

There is 2.6% of the river segment's length in private property. Of the acreage contained in the river corridor, only 1.3% involves private property. State lands comprise 10.5% of the river corridor's length and 5.3% of its acreage.

3. Current management situation:

Most of the East Little Owyhee River segment lies within the Little Owyhee River WSA ID-16-48C. The State land area at the beginning of the segment is not within the WSA. The northernmost stretch of the river, from the road crossing downstream, is also not in the WSA. It is, however, within the boundary of the Owyhee Canyonlands Special Recreation Management Area (SRMA). This designation, as well as part of the WSA, is overlapped by the Owyhee River Area of Critical Environmental Concern (ACEC). The ACEC designation extends up the East Little Owyhee River Canyon for a distance of about 4.5 miles.

A. Transportation, facilities and developments

Cultural modifications along the East Little Owyhee River are limited to two areas. In the vicinity of the Star Valley Ranch, two fences have been constructed across the river. The first is at the very beginning of the river segment (mile-0.1); the other at mile-0.7. The first fence skirts along the base of the cliffs to the east of the ranch site and crosses the river at the mouth of the canyon on State of Idaho lands. The second fence is the continuation of a fenceline which crosses the plateau south of the river and extends over the canyon rimrock onto the upper elevation talus slopes. This fence also lies on State land. Within 0.5 miles downstream of the second fence are two old pack trails identified on USGS topographic maps. The condition of these trails is unknown.

As the river segment merges with the South Fork Owyhee River Canyon, a primitive dirt road parallels the East Little Owyhee River. The road extends from the river confluence upstream along the west shore of the East Little Owyhee River for a distance of about 0.75 miles before crossing and climbing eastward out of the canyon. This road serves as the primary access route onto the "45" Plateau from Idaho and is periodically maintained; however, the use of 4-wheel drive vehicles in required because of the steep road grade, etc. As described in the South Fork assessment (see Segment S1a-c), there is a small corral at the river confluence.

B. Recreation activities and visual quality

The East Little Owyhee River is not, from a logistical standpoint, a boatable stream. The canyon can be readily backpacked in the spring months when water remains available. However, the scenic quality of the canyon is not considered high enough to attract recreation users. Most backpacking use of the Owyhee Canyonlands system occurs in the more scenic major tributary canyons. This assessment is consistent with that of the wilderness inventory: the East Little Owyhee River WSA lacks outstanding opportunities for primitive recreation values, though is does possess outstanding opportunities for solitude. Recreational values are not considered of national, regional or local significance.

The scenic quality of the East Little Owyhee River Canyon has an overall low-Class B scenic quality (BLM Handbook H-8410-1). This ranking is due to a limited diversity of geological and vegetative landscapes and the subordination of vertical forms to talus slopes. A lack of water and/or a lack of water quality is also a contributing factor. The river segment's scenic values are not of local, regional or national significance.

C. Livestock grazing

The East Little Owyhee River corridor affects portions of two (2) livestock grazing allotments (MIC categories noted):

0629 - "45" (I)
0661 - Tent Creek (I)

D. Stream flow/water quality

The East Little Owyhee River is a perennial water course, yet its flows are readily subject to "dry up" in below normal water years. Flows range from summer pooling (with subsurface movement) to an historic high estimated at under 1,000 cfs in 1984 and 1993. During normal water years, flows are not sufficient to contribute to the quality of the river corridor.

Water quality on the East Little Owyhee River is typical of that found in association with smaller desert rivers of the Interbasin Region where extremely low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The river corridor is judged to have outstandingly remarkable wildlife values primarily because it contains a portion of the nationally significant California bighorn sheep habitat of the Owyhee Canyonlands complex. The river canyon also provides upland and riparian habitats for a number of wildlife species including mule deer, cougar, bobcat, small ground mammals, reptiles, a host of small birds, raptors, and bats. River otter, beaver, and muskrat may use the river's lower reaches near the confluence with the South Fork Owyhee River on a seasonal basis when flows are sufficient (spring and early summer). Several of these species, including bighorns, are sensitive or Category 2 federal candidate species.

Fisheries habitat conditions in the lower East Little Owyhee River segment have not been inventoried. However, because of limited flows, the river segment is presently judged to be of limited value as a fishery resource. Efforts are underway to improve habitat conditions through changes in grazing practices. While such efforts may improve flow levels (at least seasonally), reduce siltation, decrease temperatures, and enhance cover, what the overall benefit to fisheries will be on this segment cannot be speculated.

B. Geology

Like most of the Owyhee Canyonlands, the East Little Owyhee River segment has geologic formations of volcanic origin (Miocene). The river exposes over 700 feet of basaltic flows in combination with underlying rhyolitic welded tuffs and tuffaceous sediments. Ongoing weathering and erosion of the basalt and rhyolite has created a mixture of sculptured rock formations and talus rubble fields. The river segment's geological features contribute to the overall geological value of the Owyhee River system. However, the formations found in association with the East Little Owyhee River are the least diverse of any river segment in the region (southwest Idaho). The geological values are not considered of local, regional or national significance.

C. Cultural resources

There are numerous prehistoric archaeological sites which have been discovered along the rimrock areas, or in association with rock shelters or streamside habitation, within the Owyhee Canyonlands system. Canyon areas such as those of the East Little Owyhee River may contain a number of sites of unknown significance. Intensive cultural inventories along the lower East Little Owyhee River have not been undertaken nor are they currently planned. There are no known historic sites along the East Little Owyhee River within the defined river segment.

D. Wilderness

The East Little Owyhee River corridor contains most of the features which give the Little Owyhee River WSA its wilderness character. The river canyon is the major attraction in the WSA: providing outstanding opportunities for solitude, but not for primitive recreation. The lower 4.5 miles of the river canyon and surrounding plateau habitat for bighorn sheep have been found suitable for wilderness designation.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the river corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. No geothermal resource development potential is known to exist.

B. Water resource development

The river corridor has no site reserve for water power or storage development. The potential for power/irrigation site development is considered low due to the limited supply of water available in the East Little Owyhee River.

C. Aircraft overflights

The East Little Owyhee River corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the river segment occur on a regular basis, affecting mostly canyonlands near the 45 Ranch. The flights cause a temporary disruption in the canyon's otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the river corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing a targeting site(s) to the east of the river segment (Garat plateau) is expected to severely jeopardize the canyon's solitude opportunities by substantially increasing the frequency of aircraft overflights throughout the length of the river segment.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the river segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and recreational values.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the East Little Owyhee River segment.

7. Public, State, local and Federal interest in the designation of the river corridor:

Interest has been shown by State and Federal agencies, and by local publics for river protection and/or designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

The BLM would seek recreational and/or scenic easements, or fee title acquisition through exchange or purchase, on the 40 acres of private property. The BLM will also seek ownership of the 160 acres of State held lands through the ongoing BLM/Idaho exchange program.

8. Estimated cost for the administration and development of the river corridor:

   A. Anticipated funding requirements for the East Little Owyhee River:

      See the River Suitability Summary document for estimates of funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

      Exchanges: Tent Creek area:
      $0 as part of larger Idaho/BLM land exchange.

      Easements: 45 Ranch:
      None (see easements under South Fork Owyhee River suitability assessment).

      Acquisition: none.

9. Ability of the BLM to manage the river corridor as a National River designation:

The river corridor is geographically isolated within a deep canyon with only one vehicle access point. Only two parcels of non-federal land exist within the canyon, one of which is accessed by an existing dirt road. Cooperative management with the landowner, including possible easements, can ensure compatible use and/or development of the private inholding. Recreation use at present is very low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequent some increased interest in recreation activities along the river corridor. Limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management.

The vehicle route across the East Little Owyhee River will be maintained for reasonable access, including public access to the 45 Ranch. No new road construction would be allowed in the river segment. Reconstruction or realignment of the affected road would be allowed to occur to meet the operational needs of the 45 Ranch and retain adequate access by the general public. Such management provisions would require a recreational classification in the lower end of the river segment (South Fork confluence).

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. The BLM will negotiate for recreational and scenic easements which would allow for continued historic uses of private inholdings.

11. Other issues and concerns identified in the land use planning process:

A. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the river channel, but any cross-fencing of the river and tributary streams within the defined corridor would be prohibited.

B. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited in any wild designation. Heavy equipment can be approved with discretion in the recreational section to protect life and property at the 45 Ranch.

C. Military overflights offer the greatest potential for adverse impacts to recreation values within the river corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 9.5-mile length of the East Little Owyhee River (Segment S2) is not suitable for designation as a component of the National Wild and Scenic Rivers System. The identified outstandingly remarkable wildlife values are not of equal quality to those found on river segments already congressionally designated or recommended for designation in the Owyhee River system of Oregon, Idaho and Nevada. Other river values are not of local, regional or national significance. The existing SRMA/ACEC designations, as well as a possible wilderness designation, would give adequate protection to that portion of the river segment possessing nationally significant California bighorn sheep habitat.

Segment S3: East Fork Owyhee River

S3: East Fork Owyhee River from western boundary of Duck Valley Indian Reservation downstream to Oregon stateline, including four tributary streams: 78 miles:

S3a: Owyhee River - East Fork (hereafter referred to as the East Fork Owyhee River): Oregon stateline upstream to west boundary of Duck Valley Indian Reservation: 66.0 miles.
S3b: Bald Mountain Canyon Creek: Canyon drop-off near headwaters downstream to confluence with Owyhee River: 3.0 miles.
S3e: Piute Creek: Head of lower canyon at road crossing near Piute Basin Camp downstream to confluence with East Fork Owyhee River: 3.0 miles.
S3f: Juniper Creek: Head of lower canyon at road crossing downstream to confluence with East Fork Owyhee River: 3.0 miles.
S3g: Dukes Creek: Headwaters downstream to confluence with Owyhee River: 3.0 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the river corridor a worthy addition to the National Wild and Scenic Rivers System:

River Sub-Segment S3a and its associated tributary Sub-Segments S3b,e,f,and g are in a highly natural condition and possess outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. All of the sub-segments have been previously recommended for wilderness designation. The East Fork Owyhee River Canyon (S3a) consists of a steep to vertical-walled canyon ranging in depth from 250 feet on its east end to over 1,000 feet as it approaches the Oregon border on the west. The vertical-walled gorge framing the west end of the river segment below the East Fork's confluence with the South Fork Owyhee River (see

South Fork Owyhee River suitability determination) is known as the "Grand Canyon of the Owyhee River." Within this gorge can be found extensive areas of rhyolite pinnacle formations known as "hoodoos." This is the most dramatic area of "hoodoo" formations within the entire Owyhee River system of Oregon, Idaho and Nevada. Another spectacular gorge known as Lambert Gorge is located upstream of the South Fork's confluence.

The narrow gorges of Bald Mountain Canyon and Dukes Creek contribute to the spectacular geographic/geological features of the "Grand Canyon of the Owyhee River." The sheer-walled topography of Piute and Juniper Creek also geographically embrace the main canyon of the East Fork Owyhee River in its upper reaches where rhyolitic monoliths intermingle with steep talus slopes as the river channel carves an extremely meandering course.

Further details on the characteristics of the East Fork Owyhee River and its tributary streams are contained in the eligibility assessment.

2. Current status of landownership and uses within the river corridor:

   A. Total acres within corridor: 22,040 acres (average 276 acres per river mile):

      BLM-administered: 20,960 acres
      Private ownership: 440 acres (three parcels)
      State ownership: 640 acres

      There is 2.8% of the river segment's length in private property. Of the acreage contained in the river corridor (see attached map), only 2.0% involves private property. State lands are contained within 2.9% of the river corridor's acreage and along 1.3% of its length.

3. Current management situation:

All river sub-segments (S3a,b,e,f and g) are located within the Owyhee River Canyon WSA ID-16-48B, Owyhee River - Deep Creek WSA ID-16-49A, Yatahoney Creek WSA ID-16-49D and Juniper Creek WSA ID-16-52, which are being managed under the BLM Wilderness IMP. The entire river corridor is also contained within the existing Owyhee River Bighorn Sheep ACEC and the Owyhee Canyonlands SRMA. The canyons of the river corridor lie mostly within a VRM Class I area that will have mostly a "closed" off-highway vehicle designation; where the protection of primitive recreation settings is a management objective. The lands adjoining the access roads into Crutcher's Crossing and Garat Crossing in Sub-Segment S3a are to be managed for VRM Class II and semi-primitive motorized settings. The El Paso Gas Pipeline corridor (existing right-of-way) associated with the Garat road crossing will also be under VRM Class II management.

A. Transportation, facilities and developments

The river corridor is accessible by vehicle at two primary locations within Idaho. The westerly access is in Sub-Segment S3a where a primitive dirt road enters the canyon from the north and south to access a historic ranch site at Crutcher's Crossing which is now in BLM ownership. The easterly access is at Garat Crossing within Sub-Segment S3a where a north-south primitive dirt road crosses the river. The road was constructed during the development of the El Paso Gas Pipeline. The pipeline bridges the East Fork Owyhee River at the narrow Garat Gorge just east of the Garat Crossing road. Construction scars from the pipeline being buried in the canyon's steep outer slopes is evident to both the north and south. Several other dirt roads and jeep trails reach to the East Fork's rimrock or into its canyon bottom near the Battle Creek confluence, at Rickard Crossing (below Deep Creek confluence), and across from the Piute Creek confluence. An old abandoned and unusable "CCC" roadbed enters lower Piute Creek Canyon (S3e) near its confluence with the East Fork Owyhee River.

Crutcher's Crossing (BLM lands), the Battle Creek confluence area (private lands), public lands across from the East Fork - Piute Creek confluence, and a small private land parcel near "The Tules" have historic ruins of stone buildings, a water wheel, juniper/willow corrals, etc. These ruins are considered of both recreational and cultural value.

B. Recreation activities and visual quality

Recreation management in the East Fork Canyon is directed by the Owyhee River Special Recreation Management Area (SRMA) Management Plan (1983). The plan established an interim carrying capacity for springtime float boating activities to assure the protection of outstandingly remarkable primitive recreation and wildlife values. Presently, float boat use (both commercial and noncommercial) is at less than 10% of the interim carrying capacity and is expected to remain below this capacity for many years. Associated secondary activities include dispersed primitive camping, hiking, fishing, sightseeing, nature study and photography. Semi-primitive recreation opportunities are enjoyed via the few dirt roads that enter or approach the river corridor. These opportunities include OHV travel, hunting and rock hounding as well as the secondary activities previously mentioned.

The East Fork canyonlands system has been rated as Class A scenic quality (BLM Handbook H-8410-1). Its outstandingly remarkable scenic quality is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyon system contributes significantly to the area's outstandingly remarkable recreational values.

C. Livestock grazing

The East Fork Owyhee River corridor affects portions of seven (7) livestock grazing allotments (MIC categories noted:

0629 - "45" (I)
0540 - Bull Basin (I)
0634 - Castlehead-Lambert (I)
0551 - Sheep Hills (I)
0584 - Garat (I)
0803 - Big Springs (I)
0805 - Riddle (I)

D. Stream flow/water quality

The East Fork Owyhee River is a perennial water course with flows ranging from just under 100 cfs in late summer to a historic high of over 10,000 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the river corridor's outstandingly remarkable values.

Water quality on the East Fork is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The river corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer (crucial mule deer winter range), cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and a large population of California bighorn sheep. The California bighorn sheep habitat of the East Fork is considered of national significance. Several of these wildlife species, including bighorns, are sensitive or Category 2 federal candidate species.

The waters of the river segment support populations of muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species. The East Fork corridor is recognized as being of regional significance for its waterfowl nesting habitat.

B. Vegetation

The canyons of the East Fork and its tributary streams are comprised of a sagebrush-bunchgrass vegetation community in generally good to pristine condition. The canyons have no woodland or timber resources other than a few widely scattered juniper trees. The East Fork Canyon contains an oxbow canyon formation known as "The Tules." This area is a riparian area rich in vegetation diversity and has special status species. An ACEC for "The Tules" is proposed in the Owyhee RMP.

A number of sensitive plant species exist elsewhere within the river corridor.

C. Geology

The East Fork Canyon and its tributaries are predominately Miocene rhyolitic welded tuffs and tuffaceous sediments capped with a thin mantle of basaltic flows. The river has either cut vertically into the rhyolite to form vertical-walled gorges which have areas of numerous pinnacles or hoodoos, or has eroded the overlying basalt into steep talus slopes that bury the rhyolite strata. The hoodoo formations, in combination with other geological formations, give the canyon outstandingly remarkable geologic values of national significance.

D. Cultural resources

The East Fork corridor contains several archaeological sites of historic value, including those at Crutcher's Crossing, the Piute Creek and Battle Creek confluences, and "The Tules" area. The historic ruins found on these sites contribute significantly to the overall recreation experience available in the canyon. Prehistoric sites are found in association with rock shelters and canyon rimrocks. None of these sites has been individually nominated to the National Register of Historic Places.

E. Wilderness

The East Fork corridor contains most of the features which give the Owyhee River Canyon, Owyhee River - Deep Creek, Yatahoney Creek and Juniper Creek WSAs their wilderness character. The river canyon and its tributary canyons are the major attraction in the WSAs: providing both outstanding opportunities for solitude and primitive recreation. The four WSAs have been found to be suitable for wilderness designation.

5. Existing or potential conflicting uses:

   A. Energy and minerals

   There are currently no mining claims on file for any lands within the river corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. Several warm springs (about 80 degrees F) seep into the river channel in the Lambert Gorge area. However, overall, the river segment has a low potential for the development of geothermal resources.

   B. Water resource development

   The river corridor has no site reserve for water power or storage development. Several feasibility studies have been done for dams on the upper East Fork. These dam sites were found to be non-suitable. The potential for power/irrigation site development is considered low due to the limited supply of water available in the East Fork watershed.

   C. Aircraft overflights

   The East Fork Owyhee River corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the river segment occur on a regular basis. The flights cause a temporary disruption in the canyon's otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the river corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing targeting sites to the south and north of the East Fork Canyon (Garat plateau and Big Springs areas) could severely jeopardize the canyon's solitude opportunities by substantially increasing the frequency of aircraft overflights throughout the length of the river segment.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the river segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on protecting nonmotorized opportunities through minimal portal facility development of launch sites, the construction of several short portage trails, and through visitor use supervision and compliance. Again, these actions could occur regardless of a national river designation.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the East Fork Owyhee River segment.

7. Public, State, local and Federal interest in the designation of the river corridor:

Interest has been shown by State and Federal agencies, and by local publics for river designation. The East Fork Owyhee River was recommended as suitable by the National Park Service in 1979. It has subsequently been recommended to Congress for designation by the President. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

The BLM would seek scenic easements or fee title acquisition through exchange or purchase for the 440 acres of private property. The BLM wishes to explore a cooperative agreement with private property owners for the preservation and eventual restoration of historic structures even if lands are not acquired.

The BLM will also negotiate for the exchange of affected state lands (640 acres).

8. Estimated cost for the administration and development of the river corridor:

   A. Anticipated funding requirements for the East Fork Owyhee River:

      See the River Suitability Summary document for estimates on funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

      Exchanges: Juniper Creek: $0 as part of larger Idaho/BLM land exchange.

      Easements: "The Tules" and Battle Creek: $220,000 for scenic/recreational easements.

      Acquisition: "The Tules" and Battle Creek:
      $275,000 (alternative to easements - willing seller only).

9. Ability of the BLM to manage the river corridor as a National River designation:

The river corridor is geographically isolated within a deep canyon with few vehicle access points. Only three parcels of non-federal land exist within the canyon, two of which are accessed by existing jeep trails. Cooperative management with landowners, including possible easements, can ensure compatible use and/or development of private inholdings. Recreation use at present is very low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequent increased interest in recreation activities along the river corridor. Limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management.

The two primary vehicle routes (Crutcher's and Garat Crossing) into the East Fork Canyon will be maintained for public access. Reasonable access to private inholdings will also continue along existing routes. No new road construction would be allowed in the river corridor. Reconstruction or realignment of roads at Crutcher's and Garat Crossing would be allowed only to mitigate natural events and ensure public safety. Such realignments would not notably affect the wild character of the river corridor.

Recreational development would be minimal. Facilities would be limited to the Garat Crossing launch site (toilet, 2-3 fire grills in a small camping area, small parking area, access road, kiosk/registration box, and other small signing), directional signs on access routes, and warning signs/portage trails around Owyhee Falls and Thread the Needle Rapid. No trail development would occur elsewhere along the river. Portage trails around the aforementioned rapids would occur to mitigate soil/vegetation and visual impacts from recreation use.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. The existing 25-foot wide right-of-way for the El Paso Gas Pipeline will continue. The BLM will negotiate for recreational and scenic easements which would allow for continued historic uses of private inholdings, or will acquire fee title from willing landowners.

11. Other issues and concerns identified in the land use planning process:

A. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the river channel, but any cross-fencing of the river and tributary streams within the defined corridor would be prohibited.

B. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited under a wild designation.

C. The restoration of cottonwood communities along the East Fork can be given consideration.

D. Military overflights offer the greatest potential for adverse impacts to recreation values within the river corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 66-mile length of the East Fork Owyhee River (Segment S3a) is suitable for designation as a component of the National Wild and Scenic Rivers System. The entire length can be managed under a wild classification to preserve its nationally and regionally significant river values.

The 12 miles of tributary streams (Bald Mountain Canyon, Duke, Piute and Juniper Creek) are not recommended as suitable for individual designation. Of this mileage, the lower 1 mile of Duke Creek, the lower 1.5 miles of Bald Mountain Canyon Creek, the lower 0.5 miles of Piute Creek, and the lower 0.75 miles of Juniper Creek would be incorporated within the designated boundary for the East Fork Owyhee National Wild River corridor. The national river designation for the primary canyon of the East Fork in Idaho would recognize that this river segment has nationally significant river values of equal quality to those found within the Owyhee National Wild River designation of Oregon.

Segments S4 & S7a: Deep Creek - Nickel Creek

S4: Deep Creek: Deep Creek - Mud Flat Road crossing (Deep Creek Crossing) downstream to confluence with East Fork Owyhee River: 32.0 miles:

S4a: Confluence with East Fork Owyhee River upstream to mouth of lower canyon: 10.5 miles.
S4b: Mouth of lower canyon upstream to mouth of upper canyon: 19.0 miles.
S4c: Mouth of upper canyon upstream to Owyhee Uplands NBC Byway (Deep Creek Crossing): 2.5 miles.

S7: Nickel Creek: Confluence with Deep Creek upstream to the northern subdivision line in the SW4SW4, Sec. 25, T. 10 S., R. 4 W.: 8.0 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the stream corridor a worthy addition to the National Wild and Scenic Rivers System:

Deep Creek (Segment S4a,b,c) and its associated tributary stream of Nickel Creek (Segment S7a) are in a highly natural condition and possess outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. Deep Creek originates at Deep Creek Crossing where Nip and Tuck Creek and Hurry Back Creek join. At the road crossing, Deep

Creek disappears into a shallow sheer-walled canyon and meanders for about 2 miles before reaching its confluence with Current Creek (see the Current Creek suitability assessment). At the confluence, the landscape is that of a cultivated hay meadow. At mile-2.5, Deep Creek becomes engulfed in a narrow, vertical-walled canyon lined with a rimrock area of climax juniper woodlands and rhyolite pinnacle formations known as "hoodoos." Along its shoreline, Deep Creek in embraced by a dense riparian area predominately comprised of willow. The canyon remains under the influence of eroding rhyolite walls until just before its confluence with Nickel Creek, where an overlying mantle of crumbling basalt forms steep talus slopes below a short, vertical rimrock face. A similar landscape is found in lower Nickel Creek until a couple of miles above Nickel Creek Crossing. The upper reaches of the Nickel Creek are contained in a narrow but shallow, sheer-walled water course blanketed with riparian (predominately willow) vegetation.

Below the confluence, Deep Creek travels through a more open, rolling plateau area until it once again submerges into the plateau landscape to carve out a 600-foot deep, extremely meandering, vertical-walled rhyolite canyon that eventually joins with the canyonlands of the East Fork Owyhee River (see the East Fork Owyhee River suitability assessment). Unlike the upper canyon, the lower canyon is generally void of juniper and hoodoos. It is defined by massive rock monoliths glazed with colorful micro-flora and has a narrow ribbon of grass/ sedge riparian community with few willows.

For more detail on the characteristics of Deep Creek and Nickel Creek, see the eligibility assessment.

2. Current status of landownership and uses within the stream corridor:

   A. Total acres within corridor: 9,260 acres (average 232 acres per stream mile):

      BLM-administered: 8,320 acres
      Private ownership: 600 acres (six parcels)
      State ownership: 340 acres

      There is 6.9% of the stream segment's length in private property. Of the acreage contained in the stream corridor (see attached map), only 6.5% involves private property. State lands are contained within 3.7% of the stream corridor's acreage and along 3.1% of its length.

3. Current management situation:

A portion of the middle Deep Creek Segment S4b is located within the Upper Deep Creek WSA ID-111(16)-44B. The lower Deep Creek Segment S4a is within the Owyhee River - Deep Creek WSA ID-16-49A. Both WSAs are being managed under the BLM Wilderness

IMP. The lower stream corridor is also contained within the existing Owyhee River Bighorn Sheep ACEC. The entire stream segment is within the Deep Creek SRMA. The canyons of the stream corridor lie mostly within a VRM Class I area that will have mostly a "closed" off-highway vehicle designation; where the protection of primitive recreation settings is a management objective. The lands adjoining the access road into Nickel Creek Crossing and the plateau lands around Brace Crossing lie within a VRM Class II area where semi-primitive motorized settings will be maintained. The upper Deep Creek Segment S4c, which lies adjacent to the Deep Creek - Mud Flat Road, also has VRM Class II lands, but these lands are managed for a roaded natural setting.

A. Transportation, facilities and developments

The stream corridor is accessible by vehicle at three primary locations. The northerly access to Deep Creek is via the Deep Creek - Mud Flat Road (Owyhee Uplands NBC Byway). The access to Nickel Creek is along a dirt road to Nickel Creek Crossing just over 3 miles above the Deep Creek confluence. The southernmost vehicle access to Deep Creek is at Brace Crossing. There is no motorized access into the lower Deep Creek Canyon area. A number of other secondary roads and jeep trails approach Deep Creek through private properties, particularly in the middle section of the stream segment around Brace Crossing upstream to the Nickel Creek Crossing.

The stream corridor is generally free of other facilities except a historic ruin and fences. A number of fences cross the stream channel in the Brace Crossing and Current Creek confluence areas. The ruin of a historic cabin rests against the Deep Creek shoreline above the Nickel Creek confluence.

B. Recreation activities and visual quality

No recreation management plan has yet been developed for the Deep Creek SRMA. Recreation management is guided by the Owyhee River ACEC objectives and the BLM Wilderness Interim Management Policy. No commercial float boating is permitted on Deep Creek. Early spring noncommercial floating has been occurring in recent normal water years using canoes and kayaks. Deep Creek is not recommended for rafting because of the willow thickets. Summer and fall use includes backpacking. Associated secondary activities include dispersed primitive camping, fishing, sightseeing, nature study and photography. Semi-primitive recreation opportunities are enjoyed via the few dirt roads that enter or approach the stream corridor. These opportunities include OHV travel, hunting and rock hounding as well as the secondary activities previously mentioned.

The Deep Creek - Nickel Creek segment has been rated as Class A and B scenic quality (BLM Handbook H-8410-1): the highly scenic areas being in the vertical-walled rhyolite canyon sections (S4a and S4b) of Deep Creek. The outstandingly remarkable scenic quality of these canyon sections is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyon system contributes significantly to the area's outstandingly remarkable recreational values.

C. Livestock grazing

The Deep Creek - Nickel Creek corridor affects portions of five (5) livestock grazing allotments (MIC categories noted):

0551 - Sheep Hills (I)
0657 - Nickel Creek FFR (I)
0550 - Star Ranch
0548 - Battleground-Boni (I)
0803 - Big Springs (I)

D. Stream flow/water quality

The Deep Creek - Nickel Creek system is a perennial water course with flows ranging from under 10 cfs in late summer to a historic high estimated above 3,000 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the stream corridor's outstandingly remarkable values.

Water quality on the Deep Creek - Nickel Creek segments is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The stream corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer (some crucial mule deer winter range), cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, some elk, and a large population of California bighorn sheep. The California bighorn sheep habitat of Deep Creek is considered of national significance. Several of these species, including bighorn, are sensitive or Category 2 federal candidate species.

The waters of the stream segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species. The stream corridor of Deep Creek is considered to be a regionally significant waterfowl nesting area.

B. Vegetation

The canyons of the Deep - Nickel Creek segment are comprised of a sagebrush-bunchgrass vegetation community in generally fair to good. The stream channel is lined by a relatively dense to extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses. Thin to dense stands of juniper woodlands cover the talus slopes and/or rimrocks of the upper Deep Creek and entire Nickel Creek canyons. Sensitive plant species exist within the stream corridor. The riparian vegetation resources of the these canyon areas are considered to be regionally significant. The vegetative resources of the grass/sedge riparian communities in lower Deep Creek Canyon are not regionally significant.

C. Geology

The Deep Creek and Nickel Creek canyons are predominately Miocene rhyolitic welded tuffs and tuffaceous sediments capped with a thin mantle of basaltic flows. The stream has either cut vertically into the rhyolite to form vertical-walled gorges which have areas of numerous pinnacles or hoodoos, or has eroded the overlying basalt into steep talus slopes that bury the rhyolite strata. The hoodoo formations, in combination with massive monolithic cliffs and other geological formations, give the canyon system outstandingly remarkable geologic values of national significance.

D. Cultural resources

The Deep Creek - Nickel Creek corridor contains several known archaeological sites of historic/prehistoric value, including ruins near the Nickel Creek confluence (log cabin) and lithic scatters associated with rock shelters and streamside habitation. The historic ruins contribute to the overall recreation experience available in the canyon. None of these sites have been nominated to the National Register of Historic Places. Yet, the area around Deep Creek is recognized as having the potential for a concentration of prehistoric sites (inventories are not complete).

E. Wilderness

The canyonlands of Deep Creek contain most of the features which give the Upper Deep Creek and Owyhee River - Deep Creek WSAs their wilderness character. The canyon system is the major attraction in the WSAs: providing both outstanding opportunities for solitude and primitive recreation. The Owyhee River - Deep Creek WSA has been found to be suitable for wilderness designation.

5. Existing or potential conflicting uses:

   A. Energy and minerals

   There are currently no mining claims on file for any lands within the stream corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. There are no known geothermal resources.

   B. Water resource development

   The stream corridor has no site reserve for water power or storage development. The potential for power site development is considered low due to the limited supply of water available in the Deep Creek watershed.

   C. Aircraft over-flights

   The Deep Creek - Nickel Creek corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the stream segment occur on a regular basis. The flights cause a temporary disruption in the stream's otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the stream corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing targeting sites just to the east of Deep Creek Canyon (Big Springs Training Range) are expected to severely jeopardize the stream's solitude opportunities by substantially increasing the frequency of aircraft over-flights throughout the length of the stream segment.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the stream segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on enhancing motorized opportunities (roaded natural setting) through the development of small recreation facilities within the scenic classification. Again, these actions could occur regardless of a national river designation.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the Deep Creek and Nickel Creek drainages.

7. Public, State, local and Federal interest in the designation of the stream corridor:

Interest has been shown by State and Federal agencies, and by local publics for river protection and/or designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

The BLM would seek scenic easements or fee title acquisition through exchange or purchase for the 600 acres of private property, as well as exchanges on affected state lands (340 acres).

8. Estimated cost for the administration and development of the stream corridor:

   A. Anticipated funding requirements for the Deep Creek - Nickel Creek system:

   See the River Suitability Summary document for estimates on funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

   Exchanges: State lands near Pole Ck. confluence:
   $0 as part of larger Idaho/BLM land exchange.

   Easements: Deep and Nickel Creek: $312,000 for scenic/recreational easements.

   Acquisition: Deep and Nickel Creek:
   $390,000 (Alternative to easement - willing seller only).

9. Ability of the BLM to manage the stream corridor as a National River designation:

The Owyhee Uplands NBC Byway located at the northern end of the stream segment will be maintained on a regularly scheduled basis. The proximity of this roadway, its increasing notoriety, and the notoriety drought to Deep Creek from national river designation will likely increase the need for recreation management on the uppermost 2.5 miles of Deep Creek. The Deep Creek confluence with Current Creek offers an outstanding opportunity for the development of a small recreation site (campground) as demands for recreation opportunities increase (see Current - Corral Creek suitability recommendation), if fee title acquisition of the affected private properties could occur. Otherwise recreational facilities would be limited to the Deep Creek Crossing launch site along the Owyhee Uplands NBC Byway (toilet, 3-5 fire grills in a small camping area, small parking area, access road, kiosk/registration box, and other small signing), directional signs on access routes, and warning signs. No trail development would occur along the stream channel. To assure limited development opportunities, this section of the stream segment should be designated under a scenic classification.

Once the stream segment has entered its northern canyon, the stream corridor as a whole is geographically isolated within no public access points other than at Nickel Creek Crossing and Brace Crossing). These routes will be subject to maintenance and reconstruction or realignment of these roads would be allowed only to mitigate natural events and ensure public safety. No new road construction would be allowed on public lands in the stream corridor. But reasonable access to private inholdings will continue. (Only five small parcels of private land exist downstream of the canyon mouth.) Cooperative management with landowners, including possible easements, can ensure compatible use and/or development of private inholdings.

Recreation use of the stream's canyon sections is presently low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequently increased interest in recreation activities along the stream corridor. However, limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management under a wild classification.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. The BLM will negotiate for recreational and scenic easements which would allow for continued historic uses of private inholdings, or could acquire fee title by willing seller only.

11. Other issues and concerns identified in the land use planning process:

A. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the stream channel, but any cross-fencing of the stream and tributary streams within the defined corridor would be prohibited on public lands.

B. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited under a wild classification. Equipment could be used in the scenic classification to protect life and property.

C. Military over-flights offer the greatest potential for adverse impacts to recreation values within the stream corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 40-mile length of the Deep Creek - Nickel Creek corridor (Segment S4 and S7a) is suitable for designation as a component of the National Wild and Scenic Rivers System. The uppermost 2.5 miles of Deep Creek would be a scenic classification. The remainder of the river corridor (37.5 miles) would be a wild classification. The national river designation would recognize the nationally significant river values of the stream segment as being of equal quality with other river segments already congressionally designated or recommended by designation in the Owyhee River system of Oregon, Idaho and Nevada.

Segments S5a and S6a: Red Canyon - Petes Creek

S5a: Red Canyon Creek: Crossing of the dirt road downstream to the confluence with the East Fork Owyhee River: 4.0 miles.

S6b: Petes Creek: Crossing of the dirt road downstream to confluence with Red Canyon Creek: 3.0 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the stream corridor a worthy addition to the National Wild and Scenic Rivers System:

The Red Canyon - Petes Creek segment (Segment S5a and S6b) is in a highly natural condition and possesses outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. The stream segment includes both the lower reaches of Red Canyon Creek and Petes Creek. The creeks cut very narrow (less than one-quarter mile wide), vertical-walled canyons through a hilly plateau landscape, southward to the East Fork Owyhee River. The sheer rhyolite canyon walls rise directly from, or within a few feet, of the stream channels along nearly the entire segment. The canyons' walls are characterized by monolithic cliffs of fracture rhyolite rock rising to a height of 200 feet. Near the base of the cliffs water sometimes seeps from the fractures to nourish small, lush, clinging plant communities. Nestled between the water courses and the cliffs, wherever vegetation can find sanctuary from spring runoff, can be found extremely lush riparian communities. In the few areas where talus slopes form between the stream and the canyons' rims can be found sagebrush-grassland communities sprinkled with an occasional juniper tree. The hilly topography surrounding the canyons permits frequent views of the plateau sagebrush-grassland communities.

For more detail on the stream values relating to the Red Canyon - Petes Creek, see the eligibility assessment.

2. Current status of landownership and uses within the stream corridor:

   A. Total acres within corridor: approximately 1,680 acres (average 303 acres per stream mile):

      BLM-administered: 1,680 acres
      Private ownership: none
      State ownership: none

3. Current management situation:

All of Red Canyon Creek and most of Petes Creek lie within the Owyhee River - Deep Creek WSA ID-16-49A. Since the establishment of the WSA boundaries a land exchange between the BLM and the State of Idaho has transferred ownership of some lands (640 acres) affecting Petes Creek to the BLM. This transfer enabled the BLM to extend its wilderness recommendation for the WSA to the road crossing on Petes Creek. These additions to wilderness recommendations are referred to as Section 202 Study Lands (a reference to Section 202 of FLPMA). The lower reaches of Red Canyon Creek, from just below "The Garden," are also contained within the Owyhee River ACEC. In addition, these lands are overlapped by the Owyhee Canyonlands SRMA.

   A. Transportation, facilities and developments

      Road crossings mark the beginning of this stream segment. There is also a livestock fence which traverses the bottom of Red Canyon Creek for less than 0.1 miles at its road crossing. At several locations the surrounding hilly plateau topography allows the viewing of some steel posts associated with fencelines which run along the rimrocks of upper Red Canyon Creek. About one mile below the streams' confluence, a jeep trail ends at the east rim of Red Canyon. From this jeep trail, a pack trail reaches into the canyon bottom to an area known as "The Garden." The pack trail climbs out of the canyon and continues westward over the plateau toward Crutcher's Crossing on the East Fork Owyhee River (see the East Fork suitability assessment).

   B. Recreation activities and visual quality

      Neither Red Canyon or Petes Creek are boatable streams. Their canyon complex offers outstandingly remarkable backpacking opportunities. Current recreational use, however, is low; limited primarily to day-hiking activities associated with river trips on the East Fork Owyhee River. The canyon system is a side-canyon attraction experienced by a large percentage of river visitors. Despite the canyons' scenic qualities and opportunities for hiking, wildlife viewing, photography, and fishing, they are not are expected to attract visitors from the Pacific Northwest (PNW) region except those participating in river trips, or some may backpack the canyons as part of an overall East Fork backpack trip. The Red Canyon-Petes Creek canyon system itself is too small to attract visitors from the PNW. Independent of its support of the East Fork river float experience, the recreational opportunities are considered only of local significance.

The Red Canyon - Petes Creek canyons have been rated as having Class A scenic quality (BLM Handbook H-8410-1). Its outstandingly remarkable scenic values are attributable to a diversity of geologic and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyons contribute significantly to the area's outstandingly remarkable recreational values, particularly near the East Fork confluence.

C. Livestock grazing

The Red Canyon - Petes Creek corridor affects portions of three (3) livestock grazing allotments (MIC categories noted):

0540 - Bull Basin (I)
0634 - Castlehead-Lambert (I)
0593 - Crutcher Crossing (M)

D. Stream flow/water quality

The Red Canyon - Petes Creek segment is defined as a perennial water course at least in its lower reaches. Accumulative flows will range from well under 5 cfs in late summer to a historic high estimated above 500 cfs in 1984 and 1993. Surface water will remain at least pooled (with sub-surface movement) in lower Red Canyon Creek, below the Petes Creek confluence, even in dryer years. Surface water can become scarce in both stream channels above the confluence by late summer. During normal water years, flows are sufficient to contribute to the stream corridor's outstandingly remarkable values.

Water quality on the Red Canyon - Petes Creek segment is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

   A. Wildlife and fisheries

   The stream corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer, cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and California bighorn sheep; several of these species, including bighorn, are sensitive or Category 2 federal candidate species. Because of the presence of bighorn habitat, the lower stream corridor is considered of national significance. Other wildlife values are considered regionally significant.

   The waters of the stream segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species.

   B. Vegetation

   The canyons of the Red Canyon - Petes Creek segment are comprised of a sagebrush-bunchgrass vegetation community in generally fair to good. The stream channel is lined by an extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses; including hanging gardens associated with canyon wall seeps. Thin stands of juniper woodlands cover the talus slopes and/or rimrocks of the canyons. Sensitive plant species exist within the stream corridor. The vegetation resources of this stream segment are considered to be regionally significant.

   C. Geology

   Like all of the Owyhee Canyonlands, the Red Canyon-Petes Creek canyon complex has geologic formations predominately of volcanic origin (Miocene). The canyons expose 200 vertical feet of rhyolitic welded tufts and tuffaceous sediments. Ongoing weathering and erosion have carved a myriad of highly fractured, sculptured columnar shapes, including some "hoodoos," from monolithic cliffs. The entire Red Canyon-Petes Creek canyon complex is considered an integral part of the overall canyon landscape of the East Fork Owyhee River. The lower portion of the segment, which helps form the inner canyon of the East Fork, is considered a nationally significant geologic resource value.

D. Cultural resources

A cultural resource inventory of the Red Canyon-Petes Creek complex has not been completed. However, a number of archaeological sites have been identified in the Owyhee Canyonlands area, particularly on the rimrocks of canyons. The geographic relationship of the Red Canyon - Petes Creek segment with the East Fork Owyhee River Canyon suggests that the stream corridor may contain significant prehistoric cultural resource values. There are no known historic cultural sites within the Red Canyon-Petes Creek corridor.

E. Wilderness

The canyonlands of Red Canyon and Petes Creek, in combination with the adjoining East Fork Owyhee River Canyon, contain many of the features which give the Owyhee River - Deep Creek WSA its wilderness character. The canyon systems are a major attraction in the WSA: providing both outstanding opportunities for solitude and primitive recreation. The Owyhee River - Deep Creek WSA has been found to be suitable for wilderness designation.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the stream corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. There are no known geothermal resources.

B. Water resource development

The stream corridor has no site reserve for water power or storage development. The potential for power site development is considered low due to the limited supply of water available in the watershed.

C. Aircraft over-flights

The Red Canyon - Petes Creek corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights of the area occur on a regular basis. These flights cause a temporary disruption in the stream corridors otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the stream corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing targeting sites just to the southeast (Big Springs Training Range) could severely jeopardize solitude opportunities by substantially increasing the frequency of aircraft over-flights throughout the length of the stream segment, particularly in its southern reaches.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the stream segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the Red Canyon - Petes Creek drainage.

7. Public, State, local and Federal interest in the designation of the stream corridor:

Interest has been shown by State and Federal agencies, and by local publics for river protection and/or designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

8. Estimated cost for the administration and development of the stream corridor:

   A. Anticipated funding requirements for the Red Canyon - Petes Creek system:

   See the River Suitability Summary document for estimates of funding needs for the management of various eligible river segments in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

   Exchanges: none.
   Easements: none.

   Acquisition: none.

9. Ability of the BLM to manage the stream corridor as a national river designation:

The stream corridor is geographically isolated within a deep canyon with only three vehicle access points, two of which define the northern extent of the stream segment. No new road construction would be allowed in the stream corridor. Recreation use at present is low due to seasonal use restrictions imposed by the natural environment. National river designation, as well as the Byway designation, will bring increased notoriety and subsequently increased interest in recreation activities along at least the lower portion of the stream corridor's length in proximity of the East Fork Owyhee River. However, limited physical access combined with natural factors will allow the BLM to provide adequate management.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation.

11. Other issues and concerns identified in the land use planning process:

A. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the stream channel, but any cross-fencing of the stream and tributary streams within the defined corridor would be prohibited on public lands.

B. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited.

C. Military overflights offer the greatest potential for adverse impacts to recreation values within the stream corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

Though the stream segment contains outstandingly remarkable recreation, scenic, wildlife and geologic values, it is the BLM's recommendation to the Secretary that the 7.0 miles of the Red Canyon - Petes Creek segment (Segment S5a and S6b) are not suitable for designation as a component of the National Wild and Scenic Rivers System. Instead, the lower 1.5 miles of the stream segment should be included within the legal designation for the East Fork Owyhee River corridor (see East Fork suitability determination) where river vales are most outstanding. The upper 5.5 miles of the stream segment would remain, in part, under the existing SRMA/D)X administrative designations as well as remain entirely suitable for designation as a wilderness area. River values can be adequately protected under these alternative designations. A non-designation recommendation for Red Canyon - Petes Creek would give recognition to the fact that this small canyon has river values judged to be of lesser quality than those found on surrounding larger forks or tributaries of the Owyhee River system which have already been congressionally designated or recommended as suitable for designation.

Segments S8a: Current - Corral Creek

S8a: Current Creek from its confluence with Deep Creek upstream to within one mile of its headwaters, including the tributary stream of Corral Creek: 12.0 miles

Suitability Evaluation

1. Characteristics which do, or do not, make the stream corridor a worthy addition to the National Wild and Scenic Rivers System:

   Current Creek (Segment S8a) and its associated tributary stream of Corral Creek are in a highly natural condition and possess outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. Current Creek originates at the southern end of Indian Meadows within a portion of the North Fork Owyhee River WSA where a rock outcrop/old-growth juniper woodland landscape prevails. It flows 9 miles southward to its confluence with Deep Creek. Corral Creek (3 miles long) joins with Current Creek within the WSA's rugged rock outcrop - climax juniper woodland landscape to form a deep (over 300 feet), narrow, vertical-walled canyon system characterized by numerous pinnacle rock formations, monolithic rock walls glazed with colorful micro-flora, and a stream channel lined with a green ribbon of dense riparian vegetation (mostly willow). Near its crossing of the Deep Creek - Mud Flat Road (Owyhee Uplands NBC Byway), the stream flows through an open basin area of grasslands and scattered juniper before merging with Deep Creek (see the Deep Creek suitability assessment).

   For more detail on the stream values relating to the Current - Corral Creek segment, see the eligibility assessment.

2. Current status of landownership and uses within the stream corridor:

   A. Total acres within corridor: 3,625 acres (average 303 acres per stream mile):

      BLM-administered: 3,445 acres
      Private ownership: 180 acres (one parcel)
      State ownership: none

      There is 6.3% of the stream segment's length in private property. Of the acreage contained in the stream corridor, only 5.0% involves private property. State lands are not contained within the stream corridor.

3. Current management situation:

The majority of the stream segment (10.5 miles) is contained within the North Fork Owyhee River WSA ID-16-40 and North Fork Owyhee Backcountry SRMA. The lower 1.5 miles are contained within the Deep Creep SRMA. The WSA is being managed under the BLM Wilderness IMP. No management plans specific to the SRMAs has yet been developed. The canyons of the stream corridor lie mostly within a VRM Class I area that will have mostly a "closed" off-highway vehicle designation; where the protection of primitive recreation settings is a management objective. The lands adjoining the Owyhee Uplands NBC Byway lie within a VRM Class II area where a roaded natural setting is maintained.

A. Transportation, facilities and developments

The stream corridor is accessible by vehicle at its southern end where it is crossed (bridged) by the Owyhee Uplands NBC Byway: a regularly maintained gravel road. From the bridge crossing southward a primitive dirt road parallels the stream channel nearly to its confluence with Deep Creek. Associated with this road it a historic log cabin site. About one-half mile to the west, another dirt road gives access to a portion (about 1 mile) of the northern stream corridor before it enters the canyon area. The canyon portions of the stream segment are without road access or developed foot access.

The Current Creek corridor is generally free of other facilities except a fence crossing below the Corral Creek confluence, and the presence of irrigated hay meadows (and associated fencing) at the Deep Creek confluence.

B. Recreation activities and visual quality

No recreation management plan has yet been developed for the Current Creek corridor as part of either the Deep Creek or North Fork Owyhee Backcountry SRMAs. Recreation management is guided by the BLM Wilderness Interim Management Policy. No float boating is possible on Current Creek. Spring through fall use includes some backpacking. A commercial outfitter has initiated a llama packing service into the SRMA. Associated secondary activities include dispersed primitive camping, fishing, sightseeing, nature study and photography. Semi-primitive recreation opportunities are enjoyed via the two dirt roads that parallel the lower reaches of the stream corridor. These opportunities include OHV travel, hunting and rock hounding as well as the secondary activities previously mentioned.

The Current - Corral Creek canyon system has been rated as Class A scenic quality (BLM Handbook H-8410-1). The outstandingly remarkable scenic quality of these canyon sections is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyon system contributes significantly to the area's outstandingly remarkable recreational values. The lower reaches of the stream corridor as it flows through the open basin area has been rated as Class B scenic quality.

C. Livestock grazing

The Current - Corral Creek corridor affects portions of two (2) livestock grazing allotments (MIC categories noted):

0548 - Battleground-Boni (I)
0599 - Burghardt (I)

D. Stream flow/water quality

The Current - Corral Creek system is a perennial water course with flows ranging from under 10 cfs in late summer to a historic high estimated above 500 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the stream corridor's outstandingly remarkable values.

Water quality on the Current - Corral Creek segment is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The stream corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer, cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and an increasing number of elk; several of these species are sensitive or Category 2 federal candidate species.

The waters of the stream segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species.

B. Vegetation

The canyons of the Current - Corral Creek segment are comprised of a sagebrush-bunchgrass vegetation community in generally fair to good. The stream channel is lined by a relatively dense to extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses. Thin to dense stands of juniper woodlands cover the talus slopes and/or rimrocks of the canyons. Sensitive plant species exist within the stream corridor. The vegetation resources of this stream segment are considered to be regionally significant.

C. Geology

The Current and Corral Creek canyons are predominately Miocene rhyolitic welded tuffs and tuffaceous sediments. The streams have cut vertically into the rhyolite to form vertical-walled gorges which have areas of numerous pinnacles or hoodoos. The hoodoo formations, in combination with massive monolithic cliffs and other geological formations, give the canyon system outstandingly remarkable geologic values or national significance.

D. Cultural resources

The Current - Corral Creek corridor contains several known archaeological sites of historic/prehistoric value, including a historic log cabin site near the Deep Creek confluence, and lithic scatters associated with rock shelters and streamside habitation. The historic site contributes to the overall recreation experience available in the stream segment. None of the sites have been nominated to the National Register of Historic Places, yet the area in recognized as having potential for a significant concentration of prehistoric sites (inventories has not been completed).

E. Wilderness

The canyonlands of Current - Corral, in combination with its sister canyon of the North Fork Owyhee River, contain most of the features which give the North Fork Owyhee River WSA its wilderness character. The canyon systems are the major attraction in the WSA: providing both outstanding opportunities for solitude and primitive recreation. The North Fork Owyhee River WSA has been found to be suitable for wilderness designation in the Current - Corral Creek canyon area.

Appendix RECT-6. Suitability Determination for Eligible River and Stream Segments (cont.).

5. Existing or potential conflicting uses:

   A. Energy and minerals

   There are currently no mining claims on file for any lands within the stream corridor. The locatable mineral potential has been rated as low. The corridor also has low potential for the occurrence of fluid minerals. There are no known geothermal resources.

   B. Water resource development

   The stream corridor has no site reserve for water power or storage development. The potential for power site development is considered low due to the limited supply of water available in the watershed.

   C. Aircraft overflights

   The Current - Corral Creek corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights of the area occur on a regular basis. The area is also overflown by military helicopters stationed out of Gowen Field in Boise. These two types of flights cause a temporary disruption in the stream corridors otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the stream corridor's solitude opportunities. However, a proposal to intensify the use of the MOA by placing targeting sites just to the southeast (Big Springs Training Range) could severely jeopardize solitude opportunities by substantially increasing the frequency of aircraft overflights throughout the length of the stream segment, particularly in its southern reaches.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the stream segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on enhancing nonmotorized opportunities through the development of a limited trail system and through visitor use supervision and compliance. Again, these actions could occur regardless of a national river designation.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the upper Current - Corral Creek drainages.

7. Public, State, local and Federal interest in the designation of the stream corridor:

Interest has been shown by State and Federal agencies, and by local publics for river protection and/or designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

The BLM would seek scenic easements or fee title acquisition through exchange or purchase for the 180 acres of private property.

8. Estimated cost for the administration and development of the stream corridor:

   A. Anticipated funding requirements for the Current Creek - Corral Creek system:

      See the River Suitability Summary document for estimates of funding needs for the management of various eligible river segments in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

      Exchanges: none.

      Easements: lower Current Creek: $192,000 for scenic/recreational easement.

      Acquisition: lower Current Creek:
      $240,000 (alternative to easement - willing seller only)

9. Ability of the BLM to manage the stream corridor as a national river designation:

The northernmost stream corridor is geographically isolated within a deep canyon with no vehicle access points. The lower corridor just upstream of the Byway crossing has an access road over one-quarter mile from the stream channel. No new road construction would be allowed in the stream corridor north of the Byway. Recreation use at present is low due to seasonal use restrictions imposed by the natural environment. National river designation, as well as the Byway designation, will bring increased notoriety and subsequently increased interest in recreation activities along at least the stream corridor's length in proximity of the Byway. However, limited physical access combined with natural factors will allow the BLM to provide adequate management with minimal in-field presence until such time as a possible trail system is developed within the SRMA/WSA. Such a project would require an increased presence from the BLM to ensure the protection of river values.

The Owyhee Uplands NBC Byway will be maintained for public use. Reasonable access to private inholdings south of the Byway will also continue. Reconstruction or realignment of the paralleling road along the southern portion of the stream segment would be allowed only to mitigate natural events, ensure public safety, or provide access to a possible developed recreation site. Cooperative management with the landowner, including possible easements/acquisition, can ensure compatible use and/or development of the private inholdings.

The Deep Creek confluence area has potential for development as an outstanding small recreation site (campground) should BLM fee title acquisition ever occur. The site could serve as a launch site into the Owyhee River system as well as a trailhead for undeveloped backpacking/horsepacking opportunities in the region. The present undeveloped recreation site at the Deep Creek Crossing is inadequate to meet the long-term needs for camping or boating (see Deep Creek suitability recommendation). In light of such considerations, the lower stream segment should be managed under a scenic classification.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. The BLM will negotiate for recreational and scenic easements which would allow for continued historic uses of private inholdings, or acquisition of fee title would occur by a willing seller only.

11. Other issues and concerns identified in the land use planning process:

A. The question of trail construction in the Current and Corral Creek drainages remains unanswered at this time. The Owyhee RMP has identified a system of trail planning corridors for future consideration of trail construction. Trail development would have minimal affect on the natural character of the stream corridor as presently proposed, and would, therefore, be feasible under any of the three classifications.

B. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the stream channel, but any cross-fencing of the stream and tributary streams within the defined corridor would be prohibited on public lands.

C. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited within the wild classification. Equipment could be used in the scenic classification to protect life and property.

D. Military overflights offer the greatest potential for adverse impacts to recreation values within the stream corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

It is the BLM's recommendation to the Secretary that 9.0 miles of the Current Creek corridor (Segment S8a) are suitable for designation as a component of the National Wild and Scenic Rivers System. The uppermost 7.5 miles of Current Creek would be a wild classification. The remainder of the stream segment (1.5 miles) downstream of the Owyhee Uplands NBC Byway would be a scenic classification. The Corral Creek portion of the segment (3.0 miles) is not recommended for national river designation because river values can be adequately protected under a previously recommended wilderness area designation or by a continuation of the North Fork Owyhee Backcountry SRMA designation. While the Current Creek Canyon may also become designated wilderness, an additional National Wild and Scenic River designation for Current Creek would give recognition to the fact that this larger canyon has nationally significant river values of equal standing with those found on surrounding forks of the Owyhee River and Deep Creek system.

Segment C5a: Lower North Fork Owyhee River

C5a: North Fork Owyhee River from Oregon stateline upstream to the crossing of the Deep Creek - Mud Flat Road (Owyhee Uplands NBC Byway): 4.0 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the river corridor a worthy addition to the National Wild and Scenic Rivers System:

The lower North Fork Owyhee River (Segment C5a) is in a highly natural condition and possesses outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. The lower North Fork within the state of Oregon has already been recognized for its outstanding river values with its congressional designation as a National Wild River (Oregon Omnibus Rivers Bill, 1988). The river corridor consists almost entirely of steep to vertical-walled canyon ranging in depth from 200 to 500 feet. As it flows toward Oregon, the canyon changes from a landscape dominated by rhyolite monoliths and pinnacle formations (hoodoos) to one engulfed in sheer walls of blocky basalt and/or basaltic rubble fields. The river shoreline is lined with groves of mature and old-growth juniper and a dense riparian zone. The rimrocks are also draped within old-growth juniper woodlands. As soils deepen back from the canyon rims, the landscape becomes a vast, relatively flat basaltic upland covered with sagebrush-grassland communities.

Further detail on the characteristics of the North Fork Owyhee River corridor are contained in the eligibility assessment.

2. Current status of landownership and uses within the river corridor:

A. Total acres within corridor: 845 acres (average 211 acres per stream mile):

BLM-administered: 845 acres
Private ownership: none
State ownership: none

3. Current management situation:

The entire river segment lies within the North Fork Canyon SRMA. No recreation management plan has yet been written for the river segment. Under the Owyhee RMP, the river canyon will lie mostly within a VRM Class I area that will have a "closed" off-highway vehicle designation; where the protection of primitive or semi-primitive nonmotorized recreation settings is a management objective. The canyonlands adjoining the Owyhee Uplands NBC Byway, which contain the North Fork Recreation Site (campground), are to be managed for VRM Class II and a roaded natural setting. Vehicle assess will be allowed only on gravel roads within the campground.

A. Transportation, facilities and developments

The lower North Fork Owyhee River corridor is accessible by vehicle only at the North Fork Crossing (Owyhee Uplands NBC Byway) where a regularly maintained gravel road bridges the river channel. The North Fork Recreation Site is accessed via the Byway on the north side of the river. A dirt road on the surrounding plateau parallels the canyon's northern rimrock from the Byway into Oregon. This route does not give vehicle access to the canyon itself.

The North Fork Campground is a small, seven-unit recreation site containing a vault toilet, fire grills, tables, kiosk, and about 1500 feet of gravel roadbed. The site was designed to allow two-wheel drive access to a river bottom bench of predominately Great Basin wild rye, scattered juniper and dense willow vegetation without unduly altering the natural character of the canyon landscape. Camping units are widely scattered and native vegetation has been allowed to regenerate around the units to proved screening. The planting of cottonwood within the recreation site, as well as quaking aspen in the river riparian area, is being considered to provide shade and increase visual screening.

B. Recreation activities and visual quality

Recreation use in the lower North Fork segment is largely confined to use of the campground and associated hiking and fishing along its upper reaches. Few are presently known to backpack the canyon's entire length into Oregon. During high spring flows, the river segment is used by expert kayakers and rafters as an outstanding Class V whitewater run. Secondary activities associated with the river corridor's hiking and boating opportunities are dispersed primitive camping, sightseeing, nature study and photography.

The lower North Fork Canyon has been rated as Class A scenic quality (BLM Handbook H-8410-1). Its outstandingly remarkable scenic quality is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyon contributes significantly to the area's outstandingly remarkable recreational values.

C. Livestock grazing

The lower North Fork Owyhee River corridor affects portions of three (3) livestock grazing allotments (MIC categories noted):

0501 - Cliffs (I)
0539 - Trout Springs (I)
0470 - Stanford FFR (I)

D. Stream flow/water quality

The lower North Fork Owyhee River is a perennial water course with flows ranging from under 10 cfs in late summer to a historic high of over 2,000 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the river corridor's outstandingly remarkable values.

Water quality on the North Fork is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

Appendix RECT-6. Suitability Determination for Eligible River and Stream Segments (cont.).

4. Associated resource values:

   A. Wildlife and fisheries

      The river corridor is judged to have outstandingly remarkable wildlife values. The canyon as a whole supports a large diversity of wildlife species and is critical to the overall ecosystem of southwest Idaho. The habitats of the canyon provide for mule deer (possibly crucial mule deer winter range), cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and an increasing number of elk; several of these species are sensitive or Category 2 federal candidate species.

      The waters of the river segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species.

   B. Vegetation

      The canyon of the lower North Fork Owyhee River is comprised of a sagebrush-bunchgrass vegetation community in generally fair to good. The river channel is lined by a relatively dense to extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses. Thin to dense stands of juniper woodlands cover the talus slopes and/or rimrocks of the canyons. Sensitive plant species exist within the river corridor. The vegetation resources of this river segment are considered to be regionally significant.

   C. Geology

      The lower North Fork Canyon is predominately Miocene rhyolitic welded tuffs and tuffaceous sediments overlaid by a thin mantle of basaltic flows. The river has either cut vertically into the rhyolite to form a vertical-walled gorge which areas of numerous pinnacles or hoodoos, or has eroded the overlying basalt into steep talus slopes that bury the rhyolite strata. The hoodoo formations, in combination with other geological formations, give the canyon outstandingly remarkable geologic values.

   D. Cultural resources

      The North Fork corridor contains several archaeological sites of prehistoric value, including lithic scatter associated with rock shelters and streamside habitation. None of these sites has been individually nominated to the National Register of Historic Places.

E. Wilderness

The lower North Fork corridor is not contained within any wilderness study areas.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the river corridor. The locatable and fluid mineral potential has been rated as low. There are no known geothermal resources.

B. Water resource development

The river corridor has no site reserve for water power or storage development. The potential for power/irrigation site development is considered low due to the limited supply of water available in the North Fork watershed.

C. Aircraft overflights

The lower North Fork Owyhee River corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the river segment occur on a regular basis. The flights cause a temporary disruption in the canyon's otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the river corridor's solitude opportunities. A proposal to intensify the use of the MOA by placing a targeting site(s) to the southeast could affect the canyon's solitude opportunities by increasing the frequency of aircraft overflights. However, the location of the targeting area is such that potential impacts are expected to be low to moderate along the lower North Fork.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the river segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on enhancing nonmotorized opportunities through the development of a trail along the river and through visitor use supervision and compliance. The trail would require a number of bridge crossings of the river channel. Such development would alter the primitive setting of the canyon to a semi-primitive nonmotorized setting. Again, these actions could occur regardless of a national river designation unless the river is classified as wild. The proposed trail development could only occur in a recreational or scenic classification.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the lower North Fork Owyhee River segment.

7. Public, State, local and Federal interest in the designation of the river corridor:

Interest has been shown by State and Federal agencies, and by local publics for river designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

8. Estimated cost for the administration and development of the river corridor:

   A. Anticipated funding requirements for the Lower North Fork Owyhee River:

   See the River Suitability Summary document for estimates of funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

   Exchanges: none

   Easements: none

   Acquisition: none

9. Ability of the BLM to manage the river corridor as a National River designation:

The river corridor is geographically isolated within a deep canyon with only one vehicle access point. No non-federal lands are involved. Recreation use at present is very low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequent increased interest in recreation activities along the river corridor. Limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management with minimal in-field presence until such time as a possible trail/bridge(s) project is initiated (see below). Such a project would required an increased presence from the BLM to ensure the protection of river values.

Recreational development would remain confined to the existing North Fork Campground until such time as further planning might lead to the construction of a trail along the river. This trail could include the placement of a number of arch bridges across the river channel. Such development would be feasible only within a scenic or recreational classification.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation.

11. Other issues and concerns identified in the land use planning process:

A. The question of trail construction in the lower North Fork Canyon continues an issue. The Vail District has chosen not to identify a trail planning corridor in the North Fork Owyhee National Wild River corridor of Oregon. The Boise District has identified a trail planning corridor along the lower North Fork Canyon to leave open trail/bridge construction options. A wild river classification in Idaho would remove any potential for trail bridge development.

B. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the river channel, but any cross-fencing of the river and tributary streams within the defined corridor would be prohibited.

C. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited in the river corridor except at the North Fork Crossing in order to protect life and property.

D. The restoration of cottonwood and aspen communities along the North Fork is being given consideration.

E. Military overflights offer the greatest potential for adverse impacts to recreation values within the river corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

The lower North Fork Owyhee River corridor possesses river values that would allow it to be designated as a wild river corridor. However, it is the BLM's recommendation to the Secretary that the entire 4-mile length of the North Fork Owyhee River (Segment C5a) is suitable for designation as a scenic component of the National Wild and Scenic Rivers System in order to allow for future consideration of recreational trail development within the river corridor. The National Scenic River designation would recognize the fact the lower North Fork Owyhee River in Idaho has nationally significant river values of equal quality to those found in the National Wild River designation of Oregon.

Segment C5b: Upper North Fork Owyhee River

C5b: North Fork Owyhee River from the crossing of the Deep Creek - Mud Flat Road (Owyhee Uplands NBC Byway) upstream to its headwaters, including major tributary streams: 28.5 miles.

a) North Fork Owyhee River: upstream of North Fork Crossing: 16.0 miles.
b) Juniper Creek: confluence with North Fork upstream to crossing of Cliffs-Indian Meadows road: 1.5 miles.
c) Cabin Creek: confluence with Juniper Creek upstream to crossing of Cliffs-Indian Meadows road: 3.5 miles.
d) Corral Creek: confluence with Cabin Creek upstream to crossing of Cliffs-Indian Meadows road: 1.0 miles.
e) Noon Creek: confluence with North Fork upstream to crossing of Big Springs road: 3.0 miles.
f) Pleasant Valley Creek: confluence with North Fork upstream to mouth of canyon (southern subdivision line NW4NW4, Sec. 7, T. 10 S., R. 4 W.): 3.5 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the river corridor a worthy addition to the National Wild and Scenic Rivers System:

The upper North Fork Owyhee River and its tributary streams (Segment C5b) are in a highly natural condition and possess outstandingly remarkable recreational values (outstanding opportunities for primitive recreation and solitude), as well as outstandingly remarkable scenic, geologic and wildlife values. The lower North Fork within the state of Oregon has already been recognized for its outstanding river values with its congressional designation as a National Wild River (Oregon Omnibus Rivers Bill, 1988). The upper North Fork drainages that form from a convoluted landscape of rhyolitic rock outcrops and old-growth juniper woodlands into meandering sheer-walled chasms as deep as 400 feet. The canyons are characterized by rhyolite monoliths and pinnacle formations (hoodoos) often glazed with colorful micro-flora. Along much of the North Fork Canyon a southern tableland (Nickel and Pleasant Valley Table) has eroded into a vertical wall of blocky basalt to form the canyon's rimrock. The river shoreline is lined with groves of mature and old-growth juniper and a dense riparian zone. Both the rhyolitic and basaltic rimrocks are also draped within old-growth juniper woodlands.

Further detail on the characteristics of the upper North Fork Owyhee River segment are contained in the eligibility assessment.

2. Current status of landownership and uses within the river corridor:

   A. Total acres within corridor: approximately 8,720 acres (average 306 acres per river mile):

      BLM-administered: 7,960 acres
      Private ownership: North Fork Owyhee - 320 acres
      State ownership: North Fork Owyhee - 440 acres

      There is 3.5% of the river segment's length in private property. Of the acreage contained in the river corridor, only 3.7% involves private property. State lands also extend along 3.5% of the river segment's length but include 5.0% of the corridor's acreage.

3. Current management situation:

Nearly the entire river segment lies within the North Fork Owyhee Backcountry SRMA and North Fork Owyhee River WSA. These two designations overlay each other with the SRMA being somewhat larger. Only the extreme western end of the segment just upstream of the North Fork Crossing is not in the BLM designations because of private properties. No recreation management plan has yet been written for the river segment. Current management is guided by the BLM Wilderness Interim Management Policy. Under the Owyhee RMP, the river and stream canyons within the river segment will lie mostly within a VRM Class I area that will have a "closed" off-highway vehicle designation; where the protection of primitive recreation settings is a management objective. The canyonlands adjoining the Owyhee Uplands NBC Byway, and associated private properties, and the Indian Meadows road are to be managed for VRM Class II and a roaded natural or semi-primitive motorized setting. Vehicle assess will be allowed only in these access corridors.

   A. Transportation, facilities and developments

      The river corridor is accessible by vehicle at the North Fork Crossing (Owyhee Uplands NBC Byway) where a regularly maintained gravel road bridges the river channel. The North Fork Canyon can also be reached from the north by a dirt road into private properties just upstream of the Crossing. Access to the other streams within the river segment is via the Indian Meadows road: a dirt road extending from "Cliffs" on the

Byway eastward to Indian Meadows, which is located just north of the headwaters of the North Fork Owyhee River. This road, and its associated secondary route to Big Springs, cross all the tributary streams within the river segment with the exception of Pleasant Valley Creek. The stream crossings serve as the north segment boundary of all affected streams. There is no road access into the Pleasant Valley Creek portion of the river segment. However, more southerly reaches of Pleasant Valley Creek outside the river segment do have vehicle access.

No facilities or development exist within the upper North Fork Owyhee River corridor on BLM lands, with the exception of isolated gap fencing in the canyon rimrock areas. An actively used historic cabin/corral site exists on the private properties within the river segment. The westernmost boundary of the river segment is defined by the bridge crossing of Owyhee Uplands NBC Byway.

B. Recreation activities and visual quality

Recreation use in the upper North Fork segment is largely confined to backpacking, day hiking and fishing, with hunting occurring for a short time in the fall. Few are presently known to hike the length of the upper North Fork Canyon or its tributaries. One commercial outfitter, however, is initiating a llama packing service into the North Fork Owyhee Backcountry SRMA and will utilize portions of the river segment. Because of restricted access, overhanging riparian vegetation and rock falls, the river segment is not recognized for whitewater boating opportunities. Secondary activities associated with the river corridor's hiking opportunities are dispersed primitive camping, sightseeing, nature study and photography.

The upper North Fork Canyon and its tributary streams have been rated as Class A scenic quality (BLM Handbook H-8410-1). Their outstandingly remarkable scenic quality is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The scenic quality of the canyons contributes significantly to the area's outstandingly remarkable recreational values.

C. Livestock grazing

The upper North Fork Owyhee River segment affects portions of four (4) livestock grazing allotments (MIC categories noted):

0501 - Cliffs (I)
0539 - Trout Springs (I)
0546 - Pleasant Valley (I)
0548 - Battleground-Boni (I)

D. Stream flow/water quality

The upper North Fork Owyhee River drainages are perennial water courses with accumulative North Fork flows ranging from under 10 cfs in late summer to a historic high of over 2,000 cfs in 1984 and 1993. During normal water years, flows are sufficient to contribute to the river corridor's outstandingly remarkable values.

Water quality in the upper drainages of the North Fork are typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The river corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer, cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and an increasing number of elk; several of these species are sensitive or Category 2 federal candidate species.

The waters of the river segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species.

B. Vegetation

The canyons of the upper North Fork Owyhee River segment are comprised of a sagebrush-bunchgrass vegetation community in generally fair to good. The river channel is lined by a relatively dense to extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses. Thin to dense stands of juniper woodlands cover the talus slopes and/or rimrocks of the canyons. Sensitive plant species exist within the river corridor. The vegetation resources of this river segment are considered to be regionally significant.

C. Geology

The upper North Fork area is predominately Miocene rhyolitic welded tuffs and tuffaceous sediments overlaid, in part, by a thin mantle of basaltic flows. The river segment has either cut vertically into the rhyolite to form a vertical-walled gorge which areas of numerous pinnacles or hoodoos, or has eroded the overlying basalt into steep talus slopes that partially bury the rhyolite strata. The hoodoo formations, in combination with other geological formations, give the canyons outstandingly remarkable geologic values.

D. Cultural resources

The upper North Fork corridor contains several known archaeological sites of prehistoric value, including lithic scatter associated with rock shelters and streamside habitation. None of these sites has been individually nominated to the National Register of Historic Places. However, the upper North Fork drainages are considered important culturally for their potential concentration of prehistoric sites (cultural inventories are not complete).

E. Wilderness

The upper North Fork Owyhee River segment is mostly contained within the North Fork Owyhee River WSA. All affected portions of the river segment are within WSA lands previously determined to be suitable for congressional wilderness designation.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the river corridor. The locatable and fluid mineral potential has been rated as low. There are no known geothermal resources.

B. Water resource development

The river corridor has no site reserve for water power or storage development. The potential for power site development is considered low due to the limited supply of water available in the North Fork watershed.

C. Aircraft over-flights

The upper North Fork Owyhee River corridor lies within the low-elevation Military Operations Area of southwest Idaho which is administered by the Mountain Home Air Force Base. High speed, low-elevation flights over the river segment occur on a regular basis. The upper reaches of the North Fork are also overflown by military helicopters operating out of the Idaho Air Guard base (Gowen Field) in Boise. These two types of flights cause a temporary disruption in the canyons' otherwise outstanding opportunities for solitude. Present use levels are not considered a significant impact to the river segment's solitude opportunities. A proposal to intensify the use of the MOA by placing a targeting site(s) to the southeast could affect the canyons' solitude opportunities by increasing the frequency of aircraft overflights. The degree of impact cannot be determined at this time, though potential impacts are suspected to be low to moderate.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the river segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and primitive recreational values. Recreation management actions will key in on enhancing nonmotorized opportunities through the development of a limited trail system and through visitor use supervision and compliance. Again, these actions could occur regardless of a national river designation.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the upper North Fork Owyhee River drainages.

7. Public, State, local and Federal interest in the designation of the river corridor:
Interest has been shown by State and Federal agencies, and by local publics for river protection and/or designation. The designation would be managed by the Bureau of Land Management. No other Federal, State or local agencies would be affected. No apparent tribal interests are affected.

8. Estimated cost for the administration and development of the river corridor:

   A. Anticipated funding requirements for the Upper North Fork Owyhee River:

      See the River Suitability Summary document for estimates of the funding needs for the management of eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

Exchanges: State lands on North Fork Owyhee:
$0 as part of larger Idaho/BLM land exchange.

Easements: Private lands on North Fork Owyhee:
$104,000 for scenic/recreational easements.

Acquisition: Private land on North Fork Owyhee:
$130,000 (alternative to easement - willing seller only)

9. Ability of the BLM to manage the river corridor as a National River designation:

The river corridor is geographically isolated within a deep canyon with few vehicle access points. Easements of private properties would be needed on the North Fork to assure compatible development and improve public access (foot travel) along the river corridor upstream from the North Fork Crossing. Recreation use at present is very low due to seasonal use restrictions imposed by the natural environment. Designation will bring increased notoriety and subsequent increased interest in recreation activities along the river corridor. Limited physical access combined with limiting natural factors will allow the BLM to provide adequate recreation management with minimal in-field presence until such time as a possible trail project is initiated (see below). Such a project would required an increased presence from the BLM to ensure the protection of river values.

Recreational development would remain confined to the possible construction of a trail system throughout the North Fork Owyhee River SRMA/WSA. The trail planning corridors identified for this system in the Owyhee RMP include crossings of river/stream channels. Such development would be feasible within any of the three classification if design/development standards are met (see Owyhee RMP).

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation.

11. Other issues and concerns identified in the land use planning process:

A. The question of trail construction in the upper North Fork drainages remains unanswered at this time. The Owyhee RMP has identified a system of trail planning corridors for the future consideration of trail construction. Trail development would have a minimal affect on the natural character of the river corridor as presently proposed, and would, therefore, be feasible under any of the three classifications.

B. Additional drift fencing may be required along the canyon rimrocks to control livestock access to the river channel, but any cross-fencing of the river and tributary streams within the defined corridor would be prohibited.

C. The tributary drainages of the upper North Fork have been identified for the possible placement of streambank stabilization projects and instream watershed/fisheries projects. Such efforts would not be consistent with national river designation under a wild or scenic classification.

D. Methods of fire fighting will be limited. Use of heavy equipment would be prohibited in the river corridor except at the North Fork Crossing in order to protect life and property.

E. The restoration of cottonwood and aspen communities along the upper North Fork should be given consideration.

F. Military overflights offer the greatest potential for adverse impacts to recreation values within the river corridor. Cooperative management efforts with the Air Force could produce flight operational patterns which might mitigate these impacts.

Suitability Determination

The upper North Fork Owyhee River corridor (16.0 miles of Segment C5b) possesses river values that would allow it to be designated as a wild river corridor. The remaining tributary stream miles (12.5 miles) within the segment also possess these values. However, it is the BLM's recommendation to the Secretary that only the 16.0 miles of the upper North Fork Owyhee River should be designated a National Wild River. The other 12.5 miles would receive no national designation and would remain under the BLM's administrative SRMA designation. The SRMA designation is sufficient to protect the overall natural character and associated recreational values of these tributary streams. Wilderness designation is also pending on these stream reaches. While wilderness designation may also come to the North Fork Canyon, an additional designation as a National Wild River would give recognition to the fact that its larger canyon has nationally significant river values of equal standing with those found on surrounding forks of the Owyhee River system in Oregon, Idaho and Nevada that have already been congressionally designated or recommended for designation.

Segment C9: Boulder - Rock Creek

C9: Rock Creek beginning in Sec. 15, T. 7 S., R. 3 W. downstream to its confluence with the North Fork of Boulder Creek; then downstream to its confluence with Boulder Creek; then downstream into Sec. 32, T. 6 S., R. 4 W.: 11.5 miles.

Rock Creek: From western legal subdivision for Section 16, T. 7 S., R. 3 W. downstream to confluence with the North Fork Boulder Creek: 3.5 miles.
North Fork Boulder Creek: Confluence of Rock Creek downstream to confluence with South Fork Boulder Creek: 3.75 miles.
Boulder Creek: Confluence of North Fork and South Fork Boulder Creek downstream to southern boundary of private property in N2, Section 32, T. 6 S., R. 4 W.: 4.25 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the stream corridor a worthy addition to the National Wild and Scenic Rivers System:

The Boulder - Rock Creek segment (Segment C9) consists of three sections of canyon. Rock Creek is contained in a 400 to 500-foot deep canyon whose southern wall eventually reaches 700 feet above the stream channel by the time the stream joins with the North Fork Boulder Creek. The canyons of both Rock Creek and North Fork Boulder Creek have been carved into predominately rhyolite rock. The canyon landscape is that of very steep, talus slopes intermixed with sheer, monolithic cliffs eroded into a myriad of fractured columnar forms, some of which stand as individual pinnacles or spires known as "hoodoos." The cliffs are concentrated at the upper elevations of the canyons. Unlike many of the rhyolite canyons in the Owyhee Resource Area, the cliffs are not nearly continuous. They appear as "castles" of rock amid an otherwise V-shaped canyon landscape. Extending from rounded ridgelines, talus slopes descend to the extremely meandering stream channel; frequently being interrupted by cliffs and rock outcrops. The talus slopes are a mosaic of rhyolite rubble fields, where few plants grow, and shallow to deep soil areas covered with sagebrush-grassland communities. Scattered throughout the canyon at all elevations is western juniper. It exists as lone, old-growth trees that choose to grow directly from the fractures in bedrock cliffs and outcrops, or as thin to dense stands of mature to young-aged trees in areas of more soil. Juniper also grows in the riparian plant community. Riparian vegetation along the streams can be extensive; consisting predominately of willow.

As North Fork Boulder Creek joins with the South Fork, remnant basaltic flows influence the character of the landscape. The rhyolite is buried beneath a thin mantle of basalt that defines the rimrock of Boulder Creek Canyon. The canyon rimrock is a nearly continuous, vertical wall of blocky fractured bedrock. Talus slopes extend from the base of the rimrock to the stream channel; only occasionally being interrupted by small cliffs of exposed rhyolite bedrock. As in the upper reaches of the stream segment, a mosaic of rock rubble fields, sagebrush-grasslands communities, and scattered juniper cover the talus slopes. Along the stream channel is a relatively well developed riparian community with only an occasional juniper.

For more detail on the characteristics of the Boulder Creek - Rock Creek segment, see the eligibility assessment.

2. Current status of landownership and uses within the stream corridor:

   A. Total acres within corridor: approximately 3,450 acres (average 300 acres per stream mile):

      BLM-administered: 3,030 acres
      Private ownership: 340 acres (one parcel)
      State ownership: 80 acres

      There is 13.0% of the stream segment's length contained in private property. Of the acreage contained in the stream corridor, about 9.8% involves private property. State lands is the corridor account for 4.3% of its length and 2.3% of its acreage.

3. Current management situation:

The entire stream segment, with the exception of the North Fork Boulder Creek private properties, lies within the Boulder Creek Outstanding Natural Area (ONA) identified by the Owyhee MFP. No recreation activity planning for this ONA was ever done. The ONA is now being re-evaluated under the BLM's area of critical concern (ACEC) guidelines during the Owyhee RMP, but the ACEC includes only the lower portion of the stream segment involving Boulder Creek and a short portion of its North and South Fork. This lower portion is also part of the identified Boulder Creek crucial mule deer winter range. The Rock Creek portion of the segment has been dropped from ACEC consideration.

   A. Transportation, facilities and developments

      The canyon of Rock Creek is free of cultural modifications other than an occasional gap fence across the openings to side draws. Human developments/ activities begin at, and are concentrated on, the private properties extending for over 1.5 miles along North Fork Boulder Creek from its confluence with Rock Creek. The imprints of man in this stretch of stream include a historic cabin site near the streams' confluence, a old jeep trail extending over the north rim of the canyon in the vicinity of the cabin, evidence of stream gravel removal along much of the stream channel, a dirt road crossing on the west end of the properties, and a scattering of barbed wire fences. The gravel removal activities have also extended approximately one-quarter mile onto BLM lands downstream of the private properties. The road crossing includes several switchbacks and pushed over trees. On Boulder Creek, there is a fence across the bottom of the canyon about one-quarter mile below the confluence of Deer Creek. Also, a fence extends across the canyon bottom just before the end of the segment (one-quarter mile upstream of the lower private properties that define the segment). Another three-eighths of a mile above this lower fence an old jeep trail extends to the stream's north shore after traversing the bottom of a side draw. At the creek is the remnants of an old livestock bridge. A number of jeep trails dead end at the rimrock of Boulder Creek Canyon, but they are not within nor visible from the stream corridor.

B. Recreation activities and visual quality

The Boulder-Rock Creek canyon complex offers backpacking or day-hiking opportunities during the spring, summer and fall months. The fall season also brings excellent hunting opportunities. Other than hunting, current recreational use is low, and is expected to remain relatively low. The Boulder-Rock Creek segment does contain sufficient flows and appropriate channel structure to allow boating opportunities for a short period of time during the spring months. The stream is suitable for use by kayak and open canoe. Few boaters have yet to run the stream. The canyons are expected to attract recreation users only from the immediate geographical area (southwest Idaho) and not from the Pacific Northwest (PNW) region. Recreational values are not considered regionally or nationally significant.

The canyons of Boulder - Rock Creek are rated as Class A scenic quality (BLM Handbook H-8410-1). The outstandingly remarkable scenic quality found in the canyons is attributed to a diversity in geological and vegetative landscapes, the abundance of vertical forms, and the presence of water.

C. Livestock grazing

The Boulder - Rock Creek corridor affects portions of eight (8) livestock grazing allotments (MIC category noted):

0640 - Bachelor Flat FFR (I)
0631 - Lower Deer Creek (I)
0526 - Boulder Flat (I)
0630 - Baxter Basin (I)
0595 - Combination Creek (I)
0594 - Big Field FFR (M)

0465 - Quintana FFR (I)
0574 - West Antelope (I)

D. Stream flow/water quality

Boulder - Rock Creek is a perennial water course with flows ranging from under 10 cfs in the summer and fall to short-term high runoff flows over 500 cfs during winter storms and/or spring snowmelt. The streams' flows contribute significantly to the corridor's outstandingly remarkable values.

Water quality on the Boulder - Rock Creek segment is typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. The BLM is attempting to implementing Best Management Practices (BMPs) to improve overall water quality.

4. Associated resource values:

A. Wildlife and fisheries

The stream corridor is judged to have outstandingly remarkable wildlife values. The canyons as a whole support a large diversity of wildlife species and are critical to the overall ecosystem of southwest Idaho. The habitats of the canyons provide for mule deer (crucial mule deer winter range), cougar, bobcat, raptors, small ground mammals (including shrews), reptiles, small birds, bats, and an increasing number of California bighorn sheep and elk; several of these species are sensitive or Category 2 federal candidate species. The waters of the stream segment support populations of beaver, muskrat, river otter, nesting waterfowl and redband trout. River otter and redband trout are also special status species.

B. Vegetation

The canyons of the Boulder - Rock Creek segment are comprised of a sagebrush-bunchgrass vegetation community in generally fair to good to good. The stream channel is lined by a relatively dense to extremely dense riparian community of willow, juniper, chokecherry, dogwood, alder, rose, current, sedges and grasses that is typical of streams found throughout the Owyhee Resource Area. Thin to dense stands of juniper woodlands cover the talus slopes and/or rimrocks of the canyons. Sensitive plant species exist within the stream corridor. The vegetation resources of this stream segment are not considered to be regionally or nationally significant.

C. Geology

The Boulder - Rock Creek segment flows predominately through Miocene rhyolitic welded tuffs and tuffaceous sediments. In Boulder Creek Canyon, the rhyolites are topped with a thin mantle of basaltic flows. The stream has cut into the rhyolite to form a V-shaped canyon of long, steep talus slopes interrupted by pinnacle outcropping and monolithic sheer walls. The basaltic flows of Boulder Creek have been eroded into a nearly continuous vertical wall of blocky fractured rock. These geologic structures contribute to the quality of the stream segment but are not considered to be outstandingly remarkable.

D. Cultural resources

A number of prehistoric archaeological sites have been found within the Boulder - Rock Creek area in association with rock shelters and streamside habitation. Historic sites include a cabin site on private property near the Rock Creek - North Boulder Creek confluence. None of these sites have been individually recommended to the National Register of Historic Places. The collective significance of sites in this area is as yet unknown (inventories have not been completed).

E. Wilderness

There are no wilderness study areas involved with the Jump Creek segment.

5. Existing or potential conflicting uses:

A. Energy and minerals

There are currently no mining claims on file for any lands within the stream corridor. The area has been identified as having a low potential for locatable and fluid minerals, as well as for geothermal resources.

B. Water resource development

The stream corridor has no site reserve for water power or storage development. A potential for power site/water storage development has been identified for the lower Boulder - Jordan Creek drainages. So far, site development considerations have not reached upstream into this segment of stream.

C. Aircraft overflights

The Boulder - Rock Creek segment lies within the Military Operations Area (MOA) for southwest Idaho. High speed, low-elevation military aircraft overflights of this stream segment do not occur on a frequent or regular basis. The area is, however, regularly used for military helicopter training operations by the Idaho Air Guard out of Gowen Field (Boise). These flights are not considered to have a notable impact on the stream corridor's solitude or recreation values.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation by itself will have little impact on the existing or future conditions of natural or recreational resources within the stream segment. Changes in natural resource conditions will be driven by efforts to improve the overall quality of riparian systems within the river segment through changes in grazing management regardless of any type of congressional designation. Improved riparian conditions will translate into improved water quality and wildlife habitat, as well as improved scenic and recreational values.

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, water development projects for irrigation storage or power, and possible material sales of gravel. The potential for locatable and fluid mineral opportunities is judged to be low at this time. No known geothermal resources exist.

7. Public, State, local and Federal interest in the designation of the stream corridor:

Interest has been shown by State and Federal agencies, and by local publics for stream protection and/or designation. Any national designation would be managed by the Bureau of Land Management. No other Federal or local agencies would be affected. The Idaho State Department of Lands could be affected should a right-of-way be granted for the proposed Combination Ridge Road. No apparent tribal interests are affected.

The BLM could seek scenic easements or fee title acquisition through exchange or purchase for the 340 acres of private property, as well as exchanges on affected state lands (80 acres). However, such an action would not alleviate the need for a regional gravel source in this stream segment.

8. Estimated cost for the administration and development of the stream corridor:

A. Anticipated funding requirements for the Boulder - Rock Creek segment:

See the River Suitability Summary document for estimates on funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

Exchanges: Idaho/County/BLM land exchange possible for the creation of a State/ County Park.

9. Ability of the BLM to manage the stream corridor as a National River designation:

Management of the North Boulder Creek portion of the stream corridor as a component of the National Wild and Scenic Rivers System would not be possible without the obtainment of a scenic and recreational easement of private properties, or through the acquisition (willing seller only) of the properties. The lands along the creek have historically been used for the extraction of gravel presumably to surface the nearby Triangle Road. A current proposal by the Idaho Department of Lands to upgrade the dirt road crossing at the west end of the properties as part of the Combination Ridge Road construction project will in all likelihood require the removal of large amounts of gravel from the creek, as well as increase the amount of materials needed annually for road maintenance in the Triangle area of the Owyhee Resource Area. Even with easement or acquisition, the BLM itself may need to retain use of the streambed for gravel for the same purpose. In addition, the Idaho Department of Lands will seek a right-of-way across the properties for the road construction project.

The remainder of the stream segment consisting of two separate stretches of creek (Rock Creek and Boulder Creek) which could be managed as components of the National Wild and Scenic Rivers System: however, each stretch of stream would be less than five miles in length.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by the national designation. But, again, a road right-of-way issued to the Idaho State Department of Lands may be forthcoming.

11. Other issues and concerns identified in the land use planning process:

A. The Owyhee RMP has proposed the designation of the lower canyon area as an ACEC for the protection of scenic, vegetation and wildlife values. The ACEC would extend from just above the North - South Fork Boulder Creek confluence downstream to the segment's western boundary.

B. The construction of the Combination Ridge Road could necessitate the realignment of the road crossing of the North Fork Boulder Creek. This realignment and necessary right-of-way, in combination with the need for gravel extraction from the creek, is in conflict with a federal national river designation.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 11.5 miles of the Boulder - Rock segment (Segment N8) are not suitable for designation as a component of the National Wild and Scenic Rivers System. The proposal for the Combination Ridge Road and continued gravel extraction needs is in conflict with a national river designation. In addition, the two remaining sections of the segment are not judged to be long enough nor to have river values of equal quality with those of other eligible stream river segments in the Owyhee Resource Area to warrant a national river designation.

Segment N8: Jump Creek

N8: Jump Creek from livestock division fence in Sec. 8, T. 1 N., R. 5 W. downstream to the southern boundary of private property in the N2NE4, Sec. 27, T. 2 N., R. 5 W.: 4.5 miles.

Suitability Evaluation

1. Characteristics which do, or do not, make the stream corridor a worthy addition to the National Wild and Scenic Rivers System:

Jump Creek (Segment N8) above Jump Creek Falls is in a highly natural condition and possesses outstandingly remarkable recreational, scenic, vegetation and wildlife values. Jump Creek Canyon is a sheer-walled chasm where rhyolite cliffs rise directly from the stream or from small talus slopes that intermittently shape the course of the stream. The cliffs are eroded into a myriad of highly fractured, monoliths and columnar-shaped forms. The canyon reaches a depth of 600 feet and averages less than one-quarter mile across along much of its length.

Within the canyon, isolated pockets of sagebrush-bunchgrass communities occupy the talus slopes tucked between the cliffs of an otherwise vertical landscape of rock. In the bottom of the canyon, four riparian communities grow along Jump Creek. In the uppermost reaches of the canyon there is no perennial flow. There is only spring snowmelt or flash flooding from thunderstorms that takes place. The annual high water scouring limits shrubby riparian vegetation. Riparian vegetation consists mostly of tall forbs and mesic-site grasses. Ephemeral pools and deep, isolated pools that last year-round are common. About two miles into the canyon a series of numerous springs discharge along a one-quarter mile stretch of the creek. Below these springs the amount of water in Jump Creek appears to remain constant all the way through the remainder of the segment, except during high water periods. Below the springs, very dense, shrub and woodland riparian communities of syringa, red-osier dogwood and water birch occur. The forest gallery forms a continuous band of riparian vegetation above the top of Jump Creek Falls.

Jump Creek Falls is a vertical falls of about 60 feet that topographically isolates the upper 4 miles of the canyon bottom from the remaining one-half mile of stream. Below the falls, the riparian communities continue until the end of the segment. However, one-quarter mile below the falls the large canyon abruptly ends as the surrounding rhyolite plateau is replaced by the peneplain lands that extend southward from the Snake River. The peneplain is a moderately convoluted landscape of eroded rhyolites and sedimentary rock strata. The last one-quarter mile of the stream segment is contained in a small, narrow, sheer-walled canyon of rhyolite noted for its gas pocket formations.

Below the falls the canyon's natural character is being severely impacted by concentrated and often irresponsible recreation use. Erosion from human trailings is extensive. Public sanitation and safety problems are also a major management concern.

For more detail on the characteristics of Jump Creek, see the eligibility assessment.

2. Current status of landownership and uses within the stream corridor:

   A. Total acres within corridor: approximately 700 acres (average 156 acres per stream mile):

      BLM-administered: 700 acres
      Private ownership: none
      State ownership: none

3. Current management situation:

The entire length of the Jump Creek segment lies within the Jump Creek Special Recreation Management Area (SRMA) established by the Owyhee MFP. The majority of the canyon is also overlaid by the 465-acre Jump Creek Recreation Site (this site does not extend to southern livestock division fence). The Owyhee RMP proposes to reduce the SRMA to the size of the recreation site. The Owyhee RMP has also proposed that the canyon above Jump Creek Falls be designated an ACEC for its vegetation values. The upper canyon (except near the southern livestock division fence) will be managed for VRM Class I and a primitive or semi-primitive nonmotorized setting with no vehicle access. Below the falls and near the southern division fence, the stream corridor will be VRM Class II and III within a roaded natural or semi-primitive motorized setting. Recreation development (Jump Creek Recreation Site) will continue to occur to mitigate the affects of concentrated recreational use.

A. Transportation, facilities and developments

The segment begins with the east-west crossing of the stream channel by a barbed wire fence. Just below this division fence a newly constructed (1993) fence traverses the canyon bottom and eastern rimrocks in a north-south direction. The segment ends with another fence reaching to the rimrock above the creek near the northern private property. Between the fencelines, Jump Creek Canyon is free of cultural modifications until the stream reaches Jump Creek Falls. Below the falls (last one-half mile of the segment), the stream is affected by recreation developments and by the scars of abusive recreational visitor behavior. For many years the lower canyon has been marred by vandalism (spray painting), littering, multiple trailings (foot trails caused by uncontrolled visitor use) and associated erosion problems, and by the affects of human waste. Just outside the canyon, where a gravel road extends to the mouth of the canyon from South Jump Creek Road, the steep slopes of the plateau front are defaced by off-road vehicle use and associated erosion.

In 1988, the BLM began efforts to restore the scenic, recreational and watershed resources of the lower canyon area by constructing a parking lot with barriers posts, installing culverts in the existing access road and making other road improvements, and by building a one-quarter mile long trail to the base of the falls (including stairs near the parking lot). However, ORV use continues to remain a serious problem. Also, uncontrolled foot traffic at the falls continues to denude and erode surrounding slopes. The affects of recreation use extend a short distance above the falls in the form of trailings and litter. Additional work may include a trail bridge across the creek, a toilet and fire grills.

B. Recreation activities and visual quality

The primary recreational activities associated with the Jump Creek segment center around day use activities such as hiking, picnicking, sightseeing, swimming, photography, nature study, and unauthorized ORV use. The upper reaches are also popular for fall hunting. The canyon attracts visitors from throughout southwest Idaho and concentrates them in a relatively small area; leading to the environmental and social problems previously described. It is estimated that Jump Creek receives between 7,000 and 10,000 visitors per year. Recreational use above the falls in recent years has been occurring at an ever increasing level; contributing to a decline in natural values just above the falls. It is expected that the evidence of human use (trailings, litter, sanitation problems) will gradually spread upstream throughout most of the upper canyon area without management intervention.

The canyon of Jump Creek has been rated as Class A scenic quality (BLM Handbook H-8410-1). The outstandingly remarkable scenic quality of the canyon is attributable to a diversity in geological and vegetative landscapes, the prominence of vertical landforms, and the presence of water. The woodland riparian communities are particularly important to the canyon's scenic quality; making it uniquely different from other eligible river/stream segments in the Owyhee Resource Area. The scenic quality of the canyon contributes significantly to the area's outstandingly remarkable recreational values. At the mouth of the canyon, surrounding lands are rated as Class B and C scenic quality where the predominate landform is that of the Snake River peneplain. The narrow and shallow canyon of the northern end of Jump Creek is considered of Class B scenic quality.

C. Livestock grazing

The Jump Creek corridor affects portions of two (2) livestock grazing allotments (MIC categories noted):

0514 - Alkali-Wildcat (I)
0603 - Poison Creek (I)

D. Stream flow/water quality

From below the upper canyon springs, Jump Creek is a perennial water course with flows ranging from a base flow of under 10 cfs in the summer and fall to short-term high runoff flows of hundreds of cfs during winter storms and/or spring snowmelt. The base flow contributes significantly to the stream corridor's outstandingly remarkable values.

Water quality on the Jump Creek segment is somewhat typical of that found in association with desert rivers of the Interbasin Region where low flows, high summer temperatures, siltation (mostly springtime) and livestock use of adjacent lands diminish water quality. Yet, in the case of Jump Creek, human recreational use is also contributing to water quality problems. It should be noted that during base flow periods the upper canyon area, which is void of livestock and where the stream channel is sheltered from the sun along much of its course, water quality is relatively good. Water quality declines during higher flows when runoff occurs from livestock use areas to the south (Sands Basin) and below the falls where human urine and defecation exists in abundance. The BLM is attempting to implementing Best Management Practices (BMPs) to improve overall water quality.

Appendix RECT-6. Suitability Determination for Eligible River and Stream Segments (cont.).

4. Associated resource values:

A. Wildlife and fisheries

The stream corridor is judged to have outstandingly remarkable wildlife values. The unique vegetation communities of the stream segment provide habitat for a diversity of wildlife species including raptors, a host of small birds, small ground mammals (including shrews), bats, reptiles, and larger species such as mule deer, bobcat, cougar and possibly California bighorn sheep. Among these species are several sensitive or Category 2 federal candidate species. The waters of Jump Creek provide for redband trout: a Category 2 species.

B. Vegetation

The canyon of Jump Creek has unique riparian vegetation communities of birch in good to excellent condition; syringa (Idaho State Flower) being a major or dominant vegetative component of the riparian communities along much of the stream course. The canyons also contain upland vegetation in good to excellent condition. The canyon walls provide habitat for one rare plant species: Ivesia baileyi. The canyon above the falls has been recommended as an ACEC for the protection of its outstandingly remarkable vegetation values.

C. Geology

The Jump Creek Canyon is predominately Miocene rhyolitic welded tuffs and tuffaceous sediments. The stream has cut vertically into the rhyolite to form a narrow gorge of huge rock monoliths and pinnacles or hoodoo formations. These geologic structures contribute to the quality of the stream segment but are not considered to be outstandingly remarkable due largely to the short length of the canyon.

D. Cultural resources

A number of prehistoric archaeological sites have been found within the Jump Creek segment, including one near the parking lot area at the canyon's mouth. This site must be excavated to allow further recreational facility development. The significance of the sites is as yet unknown.

E. Wilderness

There are no wilderness study areas involved with the Jump Creek segment.

5. Existing or potential conflicting uses:

   A. Energy and minerals

   There are currently no mining claims on file for any lands within the stream corridor. One mining claim had existed just west of the Jump Creek Recreation Site, but it was closed in 1991 due to a lack of required assessment work. It is expected that the claim will someday be developed for the removal of diatomite or zeolite. The deposit does not extend into the Jump Creek corridor. However, development of the claim could disrupt to some extent the recreation opportunities at the Jump Creek Recreation Site because of noise and dust, and from and truck traffic along the recreation site access road.

   B. Water resource development

   The stream corridor has no site reserve for water power or storage development. The potential for power site development is considered low due to the limited supply of water available in the Jump Creek watershed.

   C. Aircraft overflights

   No military aircraft overflights regularly affect this stream segment.

6. Reasonably foreseeable impacts if designated or not designated:

National river designation could have an impact on the existing or future conditions of natural or recreational resources within the stream segment. The protection and restoration of natural resource conditions will be driven by efforts to retain or improve the overall quality of riparian systems and upland areas within the river segment through changes in recreation management and, to a lesser extent, grazing management regardless of designation. However, depending upon the classification given, national river designation could restrict or prohibit efforts to intensely manage the segment to mitigate ongoing recreational impacts by limiting the management options available; thereby possibly affecting the long-term condition of recreational and natural resources within the stream segment (see discussion under Section #9).

Resource opportunities which would be curtailed or prohibited by a national river designation include mineral/energy exploration and development, and water development projects for irrigation storage or power. However, the potential for these opportunities is considered low within the Jump Creek segment.

Appendix RECT-6. Suitability Determination for Eligible River and Stream Segments (cont.).

7. Public, State, local and Federal interest in the designation of the stream corridor:

Interest has been shown by local, State and Federal agencies, and by local publics for stream protection and/or designation. Because of the scope of recreational management problems at Jump Creek, the designation will have to be managed cooperatively by the BLM, Owyhee County and local townships. No apparent tribal interests are affected.

8. Estimated cost for the administration and development of the stream corridor:

   A. Anticipated funding requirements for the Jump Creek segment:

   See the River Suitability Summary document for estimates on the funding needs for the management of the various eligible rivers in the Owyhee Resource Area.

   B. Potential fee title acquisitions or exchanges, or purchases of recreational/scenic easements:

   Exchanges: Idaho/County/BLM land exchange possible for the creation of a State/County Park.

9. Ability of the BLM to manage the stream corridor as a National River designation:

The BLM believes that it cannot effectively manage Jump Creek as a component of the National Wild and Scenic Rivers System. The scope of the recreational management problems at Jump Creek must be collectively addressed by the BLM and by local and state agencies. The stream segment will require a sizeable investment in recreational facilities (trails and signing) which, while "hardening" the site against unacceptable natural resource deterioration, will lead to a change in the recreation opportunity setting above the falls from primitive to semi-primitive nonmotorized. This change in management setting would be allowed if the entire stream segment was designated a national recreational river. However, to provide for long-term protection of recreational and natural resources, it is expected that Jump Creek will eventually need a 24-hour managerial presence. Such a presence may be possible only through a cooperative management effort between the BLM, local affected townships (Marsing and Homedale) and Owyhee County where the transfer of ownership/management in total or in part could occur. Shared management responsibility has proven effective for individual sites along otherwise federally administered rivers (Arkansas, Colorado). Yet in the case of Jump Creek, nearly the entire stream segment's length could be involved. The creation of a BLM national river designation would be inappropriate. A local or regional designation, however, would be warranted.

10. Historical or existing rights which could be adversely affected:

No historical or existing rights would be adversely affected by a national designation.

11. Other issues and concerns identified in the land use planning process:

The Owyhee RMP has proposed the designation of the upper canyon area as an ACEC for the protection of unique vegetation values. These values are in jeopardy because of the continual encroachment of recreational use above Jump Creek Falls. The closure of Jump Creek to recreational use in light of its significance as a local and regional recreational attraction is not a realistic management option. Instead, the BLM and affected local interest must look toward a management solution which blends natural resource protection with recreation use supervision to develop Jump Creek as a facility/management intensive interpretive site to educate the public about the natural resources of southwest Idaho's canyon environments.

Suitability Determination

It is the BLM's recommendation to the Secretary that the entire 4.5 miles of Jump Creek (Segment N8) are not suitable for designation as a component of the National Wild and Scenic Rivers System. Jump Creek cannot be effectively managed for the protection of its river values within the framework of management constraints imposed under a wild, scenic or recreational classification.

Appendix VISL-1. Visual Resource Management Classification and Objectives.

Class I: The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes, however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

This VRM classification applies to BLM special administrative designations where public interest and BLM management call for the preservation of a pristine landscape.

Under this classification, construction of new rangeland (livestock, watershed, wild horse, and wildlife) facilities, roads, recreation sites and vegetation treatment projects is not permitted. Construction of recreational trails is permitted.

Class II: The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

This VRM classification applies to BLM special administrative designations where public interest and BLM management call for the protection of existing primitive landscapes regardless of scenic quality. Highly scenic, semi-primitive landscapes within the extensive management area can also have this classification. The affected lands are generally natural in appearance but are not pristine landscapes.

Maintenance and reconstruction of existing facilities such that the lines, forms, colors, and textures associated with the rehabilitated facilities harmonize with those of the characteristic natural landscapes is permitted. Except within wilderness study areas (WSAs), very limited construction of new rangeland facilities and vegetation treatment projects is permitted. Limited new recreation facilities (trails and small recreation sites) and limited road construction, reconstruction, and maintenance is permitted. If the visual contrast of the project cannot be built/rebuilt to minimize visual impacts to the characteristic natural landscape, then the project work will not be undertaken. Within WSAs, no surface disturbing activities, other than trail construction, would be allowed.

Class II-IMP: Under this classification, lands would be managed under Class II objectives during the time that nonsuitable wilderness study area (WSA) lands remain under the BLM Wilderness Interim Management Policy (IMP), with the exception that no surface disturbing activities, other than trail construction, would be allowed. If the unsuitable WSA lands are released by Congress, the affected lands would convert to VRM Class IV areas.

Class III: The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

This VRM classification applies to BLM special administrative designations and to travel corridors across the extensive management area where public interest and BLM management calls for protecting the appearance of the existing landscape; the landscape may already be highly modified. The classification occurs where the amount of use is relatively high and scenic quality is generally good.

Maintenance, construction, and reconstruction of rangeland facilities and vegetation treatment projects is permitted. Recreation site and road construction and reconstruction is permitted. In all cases, emphasis will be placed on construction techniques that will reduce the project's visual impacts to the characteristic natural landscape.

Class IV: The objective of this class is to provide for management activities which would require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

This VRM classification applies to all BLM lands in the Owyhee Resource Area not contained in special designation areas or visually sensitive areas. These lands generally reflect those lands of lesser (fair) scenic quality along major travel corridors or lands remote from travel corridors with fair to good scenic quality; the affected lands may or may not already be highly modified.

Maintenance, construction, and reconstruction of rangeland facilities and vegetation treatment projects is permitted. Recreation site construction and road construction and reconstruction is permitted. An attempt will be made to minimize visual impacts where ever possible.

Appendix SOCE-1. Input-Output Modeling Technique.

Input-output analysis is a branch of economic statistics, specifically, econometrics. The recent emergence of input-output analysis as a useful branch of economics dates from the development by Wassily Leontief in the 1930s of a general theory of production based on the economic interdependence of producing industries of the economy.

Any developed economy, whether national, regional, or local, is characterized by a high degree of interdependence among producing industries of the economy. Each economic industry not only produces goods or services, but is also a consumer itself, purchasing other goods and services for use in the production process. Interindustry relations have long been recognized (Francois Quesnay's "Tableau Economique", 1758) and have been improved upon (Leon Walras, 1870s) as knowledge increased and the ability to empirically (Leontief, 1936) estimate the model's equations have became available with statistically observable data. Through the use of simplifying assumptions, the input-output procedure is now capable of being definable and determinable, just as a picture projects the characteristics of its subject in a moment of time.

It is the process of industries selling to other industries for the purpose of providing necessary goods and services which is captured in a set of transactions tables. Each industry's output consists of summing its sales to all other industries and to final demand, i.e., to ultimate consumers rather than other producing industries. The amount of each product consumed in each industry depends only on the level of output for that industry. Equilibrium in the economy is attained when each industry's output equals its total purchases, which are in turn determined by the output of all other industries.

For a further discussion and a mathematical presentation on this subject see a short writeup in "An Introduction to I-O Modelling" in Appendix G of Micro IMPLAN User's Guide, Version 91-F (available at the Boise Field Office) or see Harry W, Richardson, Input-Output and Regional Economics, Halsted Press, New York, 1972.

Appendix MONT-1. Monitoring

Decisions outlined in the Owyhee RMP will be implemented over a period of ten to twenty years or more, depending on the availability of funding and manpower. Effects of implementation will be monitored and evaluated on a periodic basis over the life of the plan. Monitoring will be conducted to determine where problems exist with management activities and to evaluate management objectives as to whether or not they are being achieved, and to recommend future actions. If monitoring studies indicate that allotment or area objectives are not being met then management actions will be adjusted accordingly.

Priorities for monitoring allotments will be established. The methodology and intensity of study that is chosen for a particular allotment will be determined by the nature and severity of the resource conflicts that are present in that allotment.

Minimum monitoring standards have been adopted by the State of Idaho, BLM. All studies will be consistent with the minimum standards recommendations where they are applicable. Study methods will be revised to reflect any changes in minimum standards which may occur.

Purpose

The purposes of monitoring and evaluation are:

1) To determine the effects of management actions on the public land resources including vegetation and water.
2) To determine the effectiveness of on-the-ground management actions in achieving resource management objectives within planned timeframes.
3) To provide quantifiable data to identify and support needed management actions.
4) To provide quantifiable data for the periodic review and evaluation of management objectives.

Monitoring Methods

Monitoring methods must be suitable for the vegetation types or resource conditions that will be encountered. The capability of the methods to detect subtle changes due to management over short periods of time must be carefully considered.

For monitoring data to be meaningful and useful over time, there must be consistency in the kinds of data that are collected and the manner in which they are collected. However, the need for changes in sampling may occasionally arise when problems are detected during a cursory review of the collected data, when analyzing and interpreting the data or when conducting an evaluation. Serious consideration must be given to the effect changes will have on the historical value of existing data prior to instituting such changes.

The methods discussed here are the methods currently in use in the Owyhee RA. These methods are consistent with State Monitoring Guidance as outlined in Minimum Monitoring Standards for BLM-Administered Rangelands in Idaho and Bureau Policy. These are subject to change as a result of revision in State or National Standards.

Actual Use

Actual use monitoring provides information concerning the actual amount of grazing use occurring on an area of rangeland during a specific time period. It is a record of livestock use in each pasture of an allotment and represents forage consumed in terms of AUMs. Livestock actual use is provided by the permittees. Data is verified by field checks and occasional counts. The report includes livestock numbers, pasture usage, and turn-out and gathering dates.

Actual use is collected in all "I" and "M" allotments annually.

Estimated Use

Estimated use by wild horses is derived from direct animal counts conducted aerially and on-the-ground, and from extrapolation. One adult horse or one mare with foal are considered 1 animal unit. A foal is considered an animal unit when it is determined to be 6 months of age or older.

Estimated use is collected in all pastures in all of the wild horse herd management areas.

Utilization

Utilization data is collected to provide information concerning the percentage of forage that has been consumed or destroyed on an area of rangeland during a specific period of time and the grazing pattern on the allotment. Utilization data are important in evaluating the effects of grazing use on specific areas of rangeland and identifying areas of concentrated use.

The methods used in the RA for measuring utilization in upland vegetation sites are the Key Forage Plant method, utilization pattern mapping, and Cole Browse transects. Utilization in the riparian zone is monitored with stubble height measurements. Utilization is generally expressed as a percentage of available forage weight or numbers of plants, twigs, etc., that have been consumed or destroyed, and is expressed in terms of the current year's production removed.

The key forage plant method is an ocular estimate method of judging utilization within one of six utilization classes on one or more key herbaceous and/or browse species. Mapping utilization patterns involves traversing the allotment or pasture to determine the levels of use throughout the pasture. Utilization pattern mapping is utilized in conjunction with the key forage plant method to determine the level of utilization the pasture has received, to identify areas receiving an unacceptable level of use and to identify usable areas which are not receiving use.

The Cole browse method is utilized to monitor key browse species. The primary species monitored in the ORA is antelope bitterbrush. This method provides data on the level of utilization of the current years leader growth and on the age and form class of the shrubs.

The utilization in riparian zones is determined by measuring the herbaceous vegetation stubble height along a transect and averaging to determine an overall use level.

In the short term, utilization is considered with actual use and climate data to determine resource use levels and to identify the need for adjustments in management actions, adjustments in grazing use levels, and/or range improvement projects. These data can be used as the basis for implementing adjustments in grazing use through agreement or by decision.

In the long term, utilization data are considered along with actual use, authorized use, estimated use, trend, climate and any other data available or necessary for allotment evaluation. Evaluations are conducted to determine if the grazing management actions and/or practices are achieving the long-term management objectives identified in the land-use and activity plans.

Utilization is collected annually for grazed pastures with an emphasis on high priority allotments.

Trend

Trend data are important in determining the effectiveness of on-the-ground management actions and evaluating progress toward meeting management objectives. They indicate whether the rangeland is moving toward or away from its potential or from achieving specific management objectives. Trend refers to the direction of change and indicates whether rangeland vegetation is being maintained or is moving toward or away from the desired plant community or toward or away from other specific vegetation management objectives. Trends of rangeland may be judged by noting changes in composition, density, cover, production, vigor, age class, and frequency of the vegetation, and related parameters of other resources.

The primary method utilized to monitor trend of the uplands in the RA is nested frequency. The indicator of trend monitored with this method is frequency of occurrence of plant species. The analysis is measuring the changes in the frequency of occurrence of a plant species over time. Close-up and general view photographs are included with this method. Supplementing the nested frequency trend sites are ground cover data and shrub density.

The 3 x 3 photo plot method is also used to measure trend. This method includes taking a close-up photograph of a 3 x 3 foot plot and a general view photograph of the study site. Diagrams of plot vegetation are generally included with the 3 x 3 photo plots.

Methods utilized to monitor trend of riparian habitats include greenline, cover board, cross-channel profiles and photo points. Greenlines are a line intercept method to identify riparian plant community types and monitor changes in the community type over time. Cover boards monitor changes in canopy coverage of shrub species along a transect. Cross channel profiles are used to monitor changes in the size and shape of the stream channel. Photo points are used to visually monitor changes in the riparian zone at permanently marked locations. General view photographs are included with all of these methods.

Trend data are collected on a regular periodic basis depending on the allotment priority.

Climate

Climate studies provide a comparison of grazing season climatic conditions with long-term normals. Crop year (September-June) precipitation accounts for approximately 80 percent of the variation in vegetation production in the Intermountain area. The Forage Yield Index as described in Sneva and Britton, 1983 is used to adjust forage utilization.

Climate data are collected on a daily, monthly and/or annual basis, depending on the variable.

Water Quality

The goal of the water quality monitoring program is to detect progress made toward (or away from) meeting the objectives of the Clean Water Act and State of Idaho's Antidegradation Program. Elements monitored include fecal coliform, water temperature, water chemistry, sedimentation, macroinvertebrate community, fish community components, and stream riparian habitat.

Fecal coliform, water temperature, water chemistry, and the macroinvertebrate community are monitored by direct sampling of the stream and subsequent water analysis. Cobble embeddedness and Wolman pebble counts are utilized to monitor sedimentation of the stream channel. The fish community component is monitored utilizing electrofishing equipment to sample species of fish present. The stream riparian habitat is monitored by collecting information on streambank stability and on riparian vegetation. Streambank stability is determined by estimating the percent of the streambank surfaces in each of four stability classes. The greenline method described earlier is utilized for monitoring vegetation change at the water edge. Other components measured include age class of woody species, herbaceous riparian stubble height and overstream canopy coverage. Detailed descriptions of methodologies can be found in Boise District's Water Quality Program Guide (1992).

Water quality data are collected on a regular basis as needed to monitor the impacts of management actions.

Wild Horses

The following components will be monitored for wild horses:

- Vegetation resource
  1. Utilization studies
  2. Trend studies
  3. Actual use
  4. Estimated use
- Forage habits
- Home ranges
- Physical environment
- Biotic environment
- Population estimates
- Population dynamics
- Population characteristics

Vegetation resource

1. Utilization studies. Data collected will provide information concerning the percentage of forage that has been consumed or destroyed on an area of rangeland during a specific period of time and the grazing patterns. Utilization studies may be gathered more than once each year to help differentiate use among domestic livestock, wildlife and wild horses.
2. Trend studies. Trend studies will include nested frequency and photo plot methods. Both methods will be used in key use areas for wild horses and domestic livestock because key use areas may differ by animal species.
3. Actual use. Actual use monitoring provides information concerning the actual amount of grazing use occurring on an area of rangeland during a specific time. Domestic livestock actual use is provided by permittees.
4. Estimated use. The use made of forage on an area by wild horses where actual use data is not available. An animal unit month (AUM) is the amount of forage consumed by an animal unit (AU) in one month. One adult wild horse and/or a mare with foal will be considered one AU when determining forage allowances. Wild horse estimated use will be determined from field checks and direct counts.

Forage habits. Forage habits of wild horses may be determined by collecting and analyzing fecal materials from the animal. Forage preferences by season can be determined.

Home ranges. Identifying and recording seasonal use areas, migratory routes, key use areas and crucial areas as they relate to distribution and movements.

Physical environment. Inventory the physical components which influence the wild horse population. These may be detrimental or beneficial to the wild horses. Examples may include fences, roads, trails, streams and springs.

Biotic environment. Inventory the biotic environment for components which may influence horse populations. Examples may include human activities, mining, recreational use, domestic livestock and wildlife.

Population estimates. Population estimates are the enumeration of the approximate number of animals inhabiting a specific area. These estimates will be developed whenever wild horse populations are adjusted or when determining estimated use for a specific area. Direct counts will be used and may be either total counts or a sampled count of the census area.

Population dynamics. Observations of wild horses will be made periodically to collect data concerning the age class and sex ratio. This information will be used to determine productivity of the herd and the recruitment of foals into the adult age class.

Population characteristics. Population characteristics can be done in conjunction with population estimates. This information will serve as a historical record of color, animal condition and average band/animal size.

Evaluation

The analysis and interpretation of inventory and monitoring data are extremely important in the evaluation of management actions to determine their progress in meeting resource management objectives. This process must be carefully accomplished to determine if adjustments in grazing use and management actions are needed, and if so, to what extent.

The major steps involved in the evaluation process are:

1) Assemble and Display Monitoring and Other Data: Review and summarize available data which has been collected from baseline inventories, monitoring studies, supplemental studies and other sources.

2) Analyze Data: Perform all necessary calculations of data.

3) Interpret Data: After the data has been analyzed, it is interpreted to determine whether the results show a trend or have remained static over time for each type of study. This includes interpreting individual data sets and examining their interrelationships.

4) Evaluate Data: The data is evaluated for consistency, reliability, strong points, weak points, completeness and accuracy. If the results of the interpretation indicate a trend, the evaluation attempts to determine the causes of the trends and establish a course of action for future management.

5) Review Management Objectives: Management objectives must be evaluated as well as the monitoring data in order to make sure that the objectives are meaningful.

In order for management actions to be monitored and progress to be evaluated, the objectives must be measurable. They must also be reasonably attainable within a reasonable timeframe. In some cases, detection of a trend toward the desired value may sufficient to justify continuation of the management practice being evaluated, especially on poor condition rangelands where vegetation objectives will be attainable only in the long-term In these cases, intermediate objectives may be useful in evaluating the progress.

6) Evaluate Progress in Meeting Management Objectives: Determine if management objectives have been met or if adequate progress toward achieving them has occurred or if management objectives or monitoring techniques need redefining.

7) Summarize Findings and Make Recommendations: The formal evaluation must include concise management recommendations as well as recommendations on changing monitoring techniques, management objectives, key areas, or key species.

Evaluations are conducted on a regular basis as determined by the implementation of prescribed management actions, the grazing cycle length, allotment priorities, funding, and the monitoring schedule.

Appendix RISP-1. Standard Procedures and Design Elements for Range Improvements.

Range improvements are proposed to help reduce resource management conflicts and to achieve multiple use management objectives.

The following standard procedures and design elements will be adhered to in constructing range improvements within the Owyhee Resource Area. Design elements have been standardized over time to mitigate adverse impacts encountered during range improvement installations.

- Preparation of a site-specific environmental assessment prior to implementation of range improvements will be required. Proposed range improvements may be modified or abandoned if the assessment indicates that significant adverse environmental impacts cannot be avoided or mitigated.

- A wilderness inventory, required by FLPMA, has been completed in the resource area. All rangeland management activities in wilderness study areas will be consistent with the Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP) unless and until the area is removed from the study category (either designated or released by congress). Impacts will be assessed before implementing management activities to ensure that they meet the guidelines.

- Every effort will be made to avoid adverse impacts on cultural resources. A cultural resources inventory will be completed on all areas prior to any decision to perform ground-disturbing activities. This will be part of the preplanning step of a project and the results will be analyzed in the environmental assessment addressing the action (BLM Manual 8100, Cultural Resources Management). If significant cultural values are identified, the project may be relocated, redesigned or abandoned. However, where that is not possible, the BLM would consult with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in accordance with the Programmatic Memorandum of Agreement (PMOA) by and between the Bureau, the Council and the National Conference of State Historic Preservation Officers, dated January 14, 1980, which sets forth a procedure for developing appropriate mitigative measures, in compliance with Section 106 of the National Historic Preservation Act (1966) as implemented by 36 CFR Part 800. Management adherence to agreed upon mitigative measures will be implemented in compliance with these regulations.

- If a project might affect any listed threatened or endangered species or its critical habitat, consultation with the USFWS will be initiated (50 CFR 50 402: Endangered Species Act of 1973, as amended). The project will be modified, relocated or abandoned in order to obtain a "no effect" determination. If a project may contribute to the need to list a Federal candidate or Bureau sensitive species, a technical assistance request will be made to the USFWS.

Appendix RISP-1. Standard Procedures and Design Elements for Range Improvements (cont).

- Surface disturbance at all project sites will be held to a minimum. Disturbed soil will be rehabilitated to blend into surrounding soil surfaces and reseeded as needed with a mixture of grasses, forbs and browse as applicable to replace ground cover and reduce soil loss from wind and water erosion.

- Seeding will only be done to enhance and sustain multiple use values. Vegetation treatment projects will be designed using irregular patterns (untreated patches, mosaics, etc.) to provide optimum edge effect for visual quality and wildlife. Layout and design will be coordinated with local IDF&G biologist.

- Seeding will be accomplished by use of the rangeland drill in most cases. Broadcast seeding will occur on small disturbed areas, rough terrain and rocky areas. Brush will be controlled prior to seeding. Some projects will have brush control only. Brush control methods could include burning, chaining, cutting and spraying. The method to be used for individual projects will be determined on a site-specific basis during project planning. Generally, areas containing needlegrasses or rabbitbrush and areas with sandy soils will not be burned. Seeding mixtures will be determined on a site-specific basis during project planning using past experience and recommendations of appropriate state and local range and wildlife experts as needed. Anticipated increases in production through vegetation treatment projects will not be allocated until seedings are established and ready for use. All seedings will be deferred from livestock grazing for a minimum of two growing seasons to allow seeding establishment. Where deep furrow drills are used, slopes will be drilled on the contour to prevent soil erosion.

- The seeding policy for the Owyhee Resource Area is as follows: Seedings to change vegetation composition may be used when they are the most efficient method to accomplish the resource objectives identified through the planning process. The selection of the seeding area and the species to be seeded shall be based on a site-specific evaluation which considers ecological potential, technical and economic feasibility, location of unique resources, plant diversity and cumulative impacts on the ecosystem. Adapted native species than can enhance vegetative diversity composition must be given consideration in species selection. To ensure establishment seedings must be protected for a minimum of two growing seasons or until the vigorous seedlings produce their first seed crop. Once established, seedings shall be properly managed and monitored to ensure that resource objectives are accomplished.

- It is anticipated that the existing road and trail system will provide sufficient access for range improvement construction. If needed, unimproved trails and tracks will be created to reach construction sites. These trails will continue to be used for project maintenance.

- It is assumed that normal maintenance such as replacement of pipeline sections, fence posts and retreatment of vegetation will occur.

- VRM procedures will be employed to minimize adverse visual impacts caused by the range improvement project.

Additional design features are identified below.

Reservoir construction - Reservoir development will involve construction of pits and dams to impound water for livestock and wildlife use. Pits will be in dry lake beds or other natural depressions. Dams will be constructed in drainages. Water storage capacity will range from 1 to 2 acre feet. Fill material, if needed, will come from the impoundment area or a borrow area for dams. Excavated material from pits will be piled adjacent to the pit. Top soil will be stockpiled and used to rehabilitate the borrow areas.

Wells - Wells will be cased with steel pipe and sealed with concrete to prevent cave-ins and contamination. All State of Idaho water well drilling regulations will be adhered to, both in drilling and equipping. A safety devise will be installed on new powerline transformers to prevent electrocution of raptors. Metal storage tanks, painted to blend with the surrounding landscape, will be placed at each well site. Generally, tanks will be enclosed and will measure 15 to 30 feet in diameter and 6 to 12 feet in height.

Springs - Spring development will involve digging or drilling to intercept naturally occurring water flow, installing perforated pipe or concrete boxes to collect water and installing pipelines and water troughs. The spring source and trough overflow area will be fenced to prevent livestock grazing and trampling and to provide meadow habitat. A small waterhole will be developed inside the fenced overflow area for wildlife use. Ramps, rocks or float boards will be provided in all water troughs for birds and small mammals to gain access to and escape from the water.

Pipelines - Pipelines will convey water from wells to areas that lack an adequate water supply. Generally, 1 to 2 inch diameter plastic pipe will be buried with a pipe-laying devise consisting of a modified ripper tooth mounted on a tractor. The pipe will normally be laid as deep as possible under ground but no deeper than 30 inches. Where obstructions prohibit pipe burial, the pipe will be laid on the ground surface and covered with borrow soil. Reservoirs will be constructed along the pipeline and fenced to exclude livestock. This will provide wildlife water and serve as an emergency water supply in case of equipment failure. Water troughs will be installed approximately one per every mile along the pipeline. Ramps, rocks or float boards will be provided in all water troughs for birds and small mammals to gain access to and escape from the water.

Fences and cattleguards - Fences shall be designed to prevent passage of livestock without impeding wildlife movement. All fences will be constructed in accordance with Bureau Manual 1741. Fencelines will not be bladed or scraped. All fences will comply with VRM procedures. Cattleguards or gates will be installed where fences cross existing roads.

Appendix RISP-1. Standard Procedures and Design Elements for Range Improvements (cont).

Prescribed burning - Prescribed burns will be conducted to reduce juniper encroachment, to improve the ecological condition of native plant communities and to meet other resource objectives for range, wildlife and watershed. Areas with seral juniper stands and dense sagebrush stands will be evaluated for burning. Generally, no prescribed fires will be allowed in climax (old growth) juniper sites. Individual burns will be limited to 3,000 acres with a 72 hour interval between burns and will be coordinated with other activities impacting air quality to meet air quality standards. See Appendix FIRE-1, Prescribed Fire Management Plan, for additional procedures and specifications.

Watershed Stabilization Projects - Watershed stabilization projects would be used to secure eroding streambanks and prevent further erosion in side slope gullies. The projects would use unlimbed juniper trees to line stream channels (attached by steel cables), rock gabion dams, wooden planks or other materials. Disturbances associated with rock gabion dams would be mitigated by riparian vegetation regrowth and channel siltation in less than 5 years. Juniper logs would become imbedded in streamsides within 5 to 10 years. Once vegetation is restored the affected stream channels would show an overall improvement attributed to the increased abundance and diversity of riparian vegetation. Increasing riparian vegetation could also improve the year-long abundance of surface waters.

Wildlife Guzzlers - Wildlife guzzlers would consist of an apron made of corrugated steel roofing material to intercept rain water and a buried storage tank equipped with a ramp to permit access to water by game birds and other small animals. Aprons would generally be about 200 to 500 square feet in size and would be painted to blend with the surrounding landscape. The guzzlers would be fenced to exclude livestock. These guzzlers would be constructed in lower elevation desert habitats where dependable water is scarce.

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